

SAWMILL ACCESSORY



LAP SIDING ATTACHMENT OPERATOR'S MANUAL



DISCOVER THE WOODLAND™

Lap siding attachment is compatible with HM130, HM130MAX, and select HM122 & HM126 sawmills.

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TABLE OF CONTENTS

TABLE OF CONTENTS	1
TECHNICAL SPECIFICATIONS	3
COMPATIBILITY	3
COMPONENT LISTS	4
COMMON LSA COMPONENTS	4
HM122-SPECIFIC LSA COMPONENTS	5
HM126- & HM130-SPECIFIC LSA COMPONENTS	5
HM130MAX-SPECIFIC LSA COMPONENTS	5
TO-SCALE HARDWARE	6
BOLTS & SCREWS	6
WASHERS	8
NUTS	9
ASSEMBLY	10
1. TOOLS REQUIRED	10
2. SETUP BLOCKS	11
3. SAWMILL DISASSEMBLY	14
WHEEL SWEEPERS	14
CARRIAGE WHEELS AND SPACERS	15
CARRIAGE POST LOWER BOLTS	16
PUSH HANDLE BOLT	17
4. CHAIN ADJUSTMENT BRACKET	18
5. REAR IDLER, LEVER PLATES, & CHAIN LEVER	20
LEVER PLATES	21
REAR IDLER	22
TUNING BLOCK	22
INSTALLATION	23
6. CARRIAGE WHEEL ARMS	30
7. INDEXING HANDLE SPACER	32
HM126, HM130 & HM130MAX INSTALLATION ONLY	32
HM122 INSTALLATION ONLY	33
8. CABLE CHAIN	34
CARRIAGE WHEEL ADJUSTMENT	40



CARRIAGE WHEEL ALIGNMENT	42
LEVELLING THE CARRIAGE	44
9. GAS SPRING	45
10. INDEXING HANDLE	47
11. CARRIAGE WHEEL SWEEPERS	50
12. TRACK RAIL EXTENSIONS	52
13. SETUP BLOCK REMOVAL	54
OPERATION	55
ANGLING THE SAWHEAD	55
LAP SIDING CUT METHOD	58
TRAILER LOCK-DOWN	59
REPLACEMENT PARTS ORDERING	63
EXPLODED ASSEMBLY VIEWS	64
CARRIAGE WHEEL ARM	64
WHEEL SWEEPER	65
CHAIN ADJUSTMENT BRACKET	66
REAR IDLER [HM122]	67
REAR IDLER [HM126 & HM130(MAX)]	68
INDEXING HANDLE & LEVER	69
TRACK RAIL EXTENSION, TRAVEL HOOKS, CABLE CHAIN	70
PARTS LIST	71
NOTES	73



TECHNICAL SPECIFICATIONS

Item	Specification
Construction/Finish	Powder-Coated & Galvanized Steel Tubing & Plate
Shipping Weight	48 lb [21.7 kg]

COMPATIBILITY

The lap siding attachment is designed to work with the following sawmill models:

Sawmill Model	Model Years	Lap Siding Compatible?
HM122	2019 & Earlier	No
	2020 & Newer	Yes
HM126	2016 & Earlier	No
	2017 & Newer	Yes
HM130	2016 & Earlier	No
	2017—2019	Yes
HM130MAX	2020 & Newer	Yes

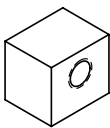
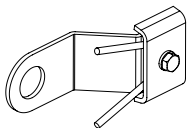
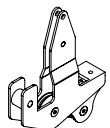
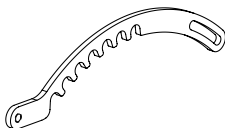
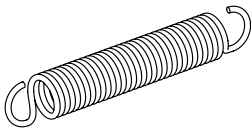
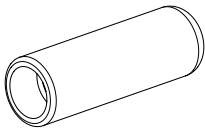
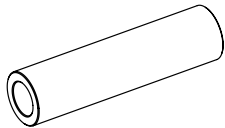
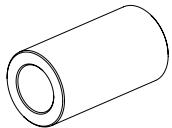
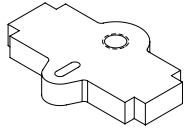
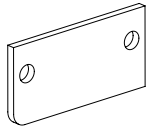
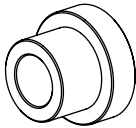
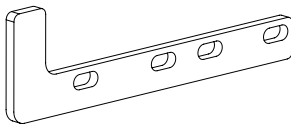
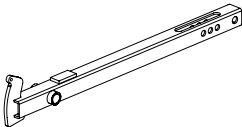
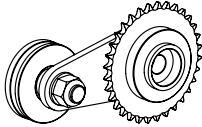
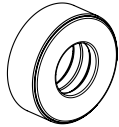
The lap siding attachment is also compatible with the sawmills listed above in combination with any Woodlander™ or Bushlander™ sawmill trailer.



COMPONENT LISTS

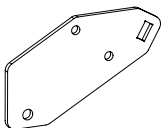
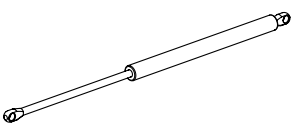
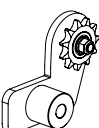
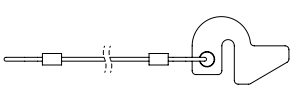

Verify all component and hardware quantities are correct prior to assembling the Lap Siding Attachment (LSA).

COMMON LSA COMPONENTS

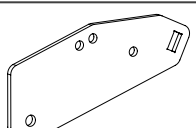
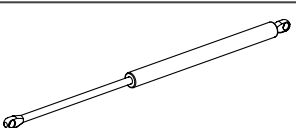
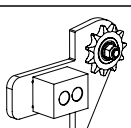
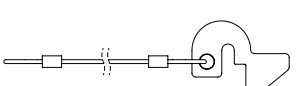

2x	Setup Block [0002913]		2x	Wheel Sweeper Assembly	
1x	Chain Adjustment Bracket Assembly		1x	Indexing Handle [0002823]	
1x	Extension Spring [0003888]		1x	Handle Grip [0004199]	
1x	Spacer (Black) [0002405]		1x	Indexing Handle Spacer [0002381]	
1x	Tuning Block [0002835]		2x	Rail Extension [0002825]	
2x	Bushing [0002385]		2x	Extended Carriage Stop [0002826]	
1x	Chain Lever [0002384]				
2x	Wheel Arm Assembly				
4x	Thrust Bearing [51204]				



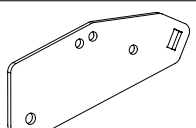
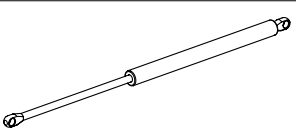
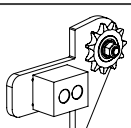
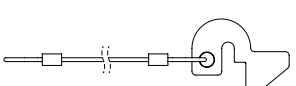

HM122-SPECIFIC LSA COMPONENTS

2x	Chain Lever Plate [0002856]		1x	Gas Spring 600 N [134.9 lbf] [0003885]	
1x	Rear Idler Assembly		2x	Travel Hook with Lanyard [0003724]	
1x	Cable Chain [0005210]				

HM126- & HM130-SPECIFIC LSA COMPONENTS

2x	Chain Lever Plate [0002830]		1x	Gas Spring 950 N [213.5 lbf] [0003886]	
1x	Rear Idler Assembly		2x	Travel Hook with Lanyard [0003188]	
1x	Cable Chain [0003545]				

HM130MAX-SPECIFIC LSA COMPONENTS

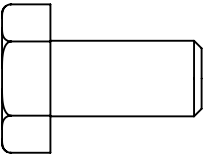
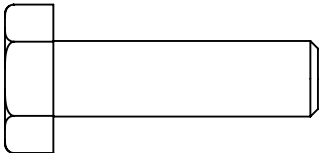
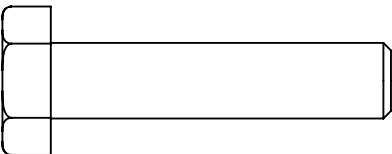
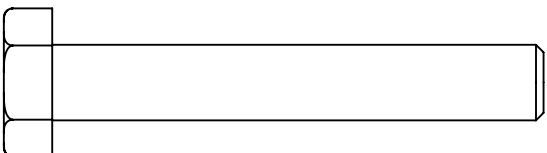
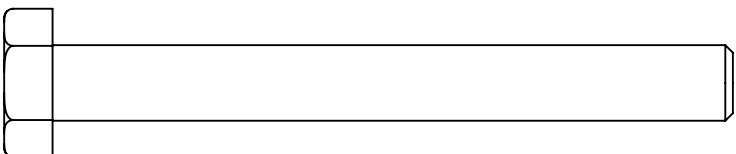
2x	Chain Lever Plate [0002830]		1x	Gas Spring 1250 N [281 lbf] [0007455]	
1x	Rear Idler Assembly		2x	Travel Hook with Lanyard [0003188]	
1x	Cable Chain [0003545]				

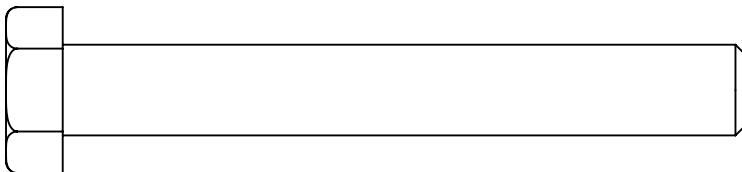
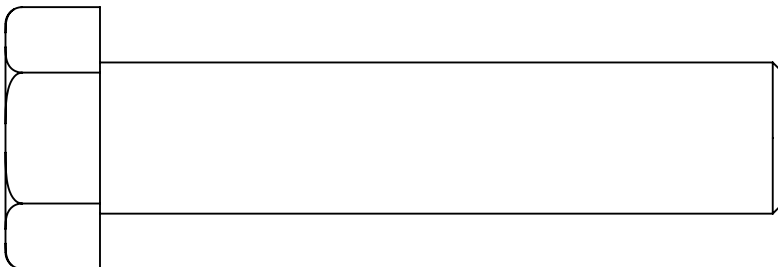
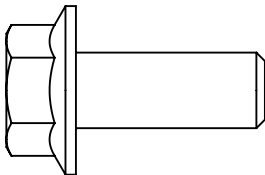
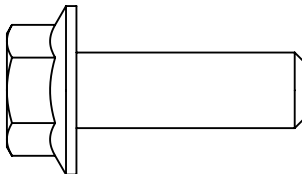
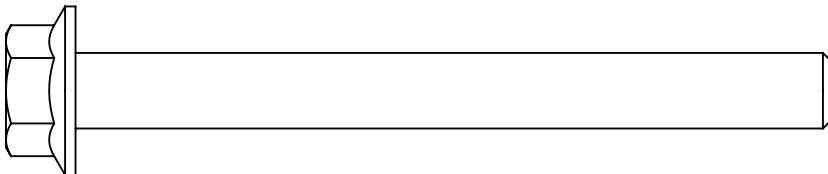


TO-SCALE HARDWARE

BOLTS & SCREWS

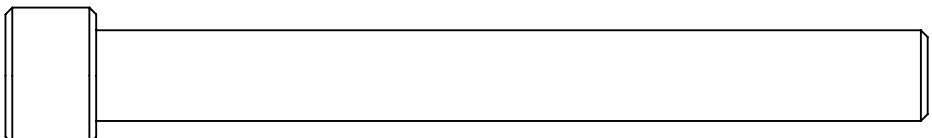
Hardware graphics are printed at 1:1 scale for ease of identification. Simply place the hardware over the image in the tables to verify it is the correct size.

2x	HHB-MBM075FCJ	M10 X 1.5 X 20 mm HEX BOLT
		
1x	HHB-MBM090FCJ	M10 X 1.5 X 35 mm HEX BOLT
		
1x	HHB-MBM100FCJ	M10 X 1.5 X 45 mm HEX BOLT
		
2x	HHB-MBM120FCJ	M10 X 1.5 X 65 mm HEX BOLT
		
2x	HHB-MBM145PCJ	M10 X 1.5 X 90 mm HEX BOLT
		

1x	HHB-MBR145FCJ	M12 X 1.75 X 90 mm HEX BOLT
		
2x	HHB-MCF145PCJ	M20 X 2.5 X 90 mm HEX BOLT
		
2x	FHH-MBM080FCM*	M10 X 1.5 X 25 mm FLANGED HEX BOLT
		
8x	FHH-MBM085FCM	M10 X 1.5 X 30 mm FLANGED HEX BOLT
		
1x	FHH-MBM155PCM	M10 X 1.5 X 100 mm FLANGED HEX BOLT
		

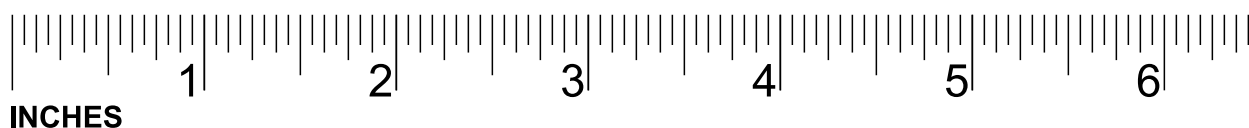
* M10 X 1.5 X 25 mm Flanged Hex Bolts are only applicable on Lap Siding Attachment setups with Woodlander XL and Woodlander MAX XL trailers (XL = with extension). They are *not* required on Bushlander or Bushlander XL trailers.



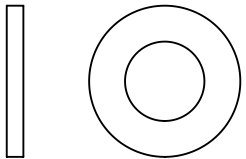
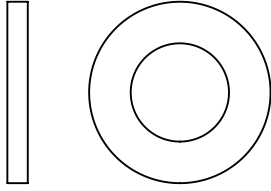
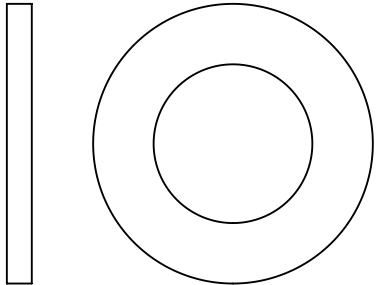
1x	SHC-MBR165PCP	M12 X 1.75 X 110 mm SOCKET HEAD CAP SCREW
		

SCALES

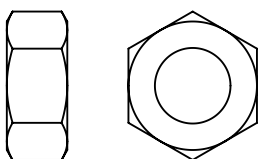
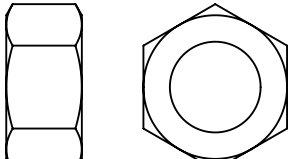
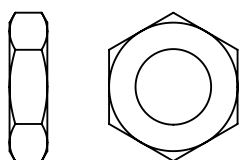
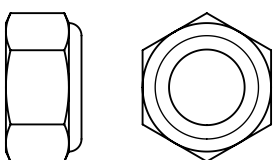
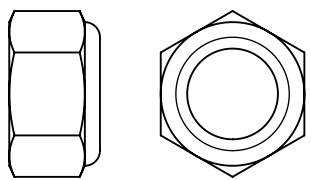
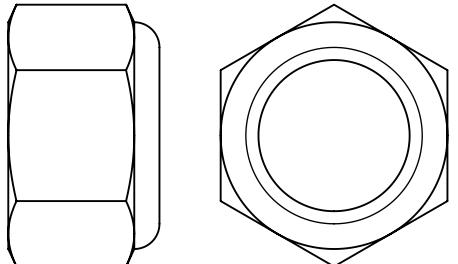
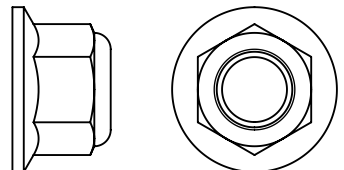
Ruler scales are also provided below to double-check bolt and screw lengths when necessary.



WASHERS

6x	FTW-MBM000AJ M10 FLAT WASHER	8x	FTW-MBR000AJ M12 FLAT WASHER
			
4x	FTW-MCF000AJ M20 FLAT WASHER		
			

NUTS

1x	HXN-MBMCH M10 X 1.5 HEX NUT	
1x	HXN-MBRCH M12 X 1.75 HEX NUT	
1x	THN-MBMCC M10 X 1.5 THIN HEX NUT	
4x	HLN-MBMCH M10 X 1.5 LOCK NUT	
4x	HLN-MBRCH M12 X 1.75 LOCK NUT	
2x	HLN-MCFCH M20 X 2.5 LOCK NUT	
11x	FLN-MBMCH** M10 X 1.5 FLANGED LOCK NUT	

**** Total M10 X 1.5 Flanged Lock Nut quantity 9x on HM122 Lap Siding Attachment**

ASSEMBLY

1. TOOLS REQUIRED

Tool	Specification
Wrench/Socket	8 mm
Wrench/Socket	9 mm
Wrench/Socket	10 mm
Wrench/Socket	13 mm
Wrench/Socket	14 mm
Wrench/Socket	15 mm
Wrench/Socket	16 mm
Wrench/Socket	17 mm
Wrench/Socket	18 mm
Wrench/Socket	19 mm
Hex Key	Set of Metric Hex Keys (e.g. 2-10 mm)
Adjustable Wrench	Variable
Ratchet	$\frac{3}{8}$ or $\frac{1}{2}$ in Drive

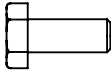
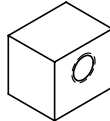


BOLT TORQUE WARNING!

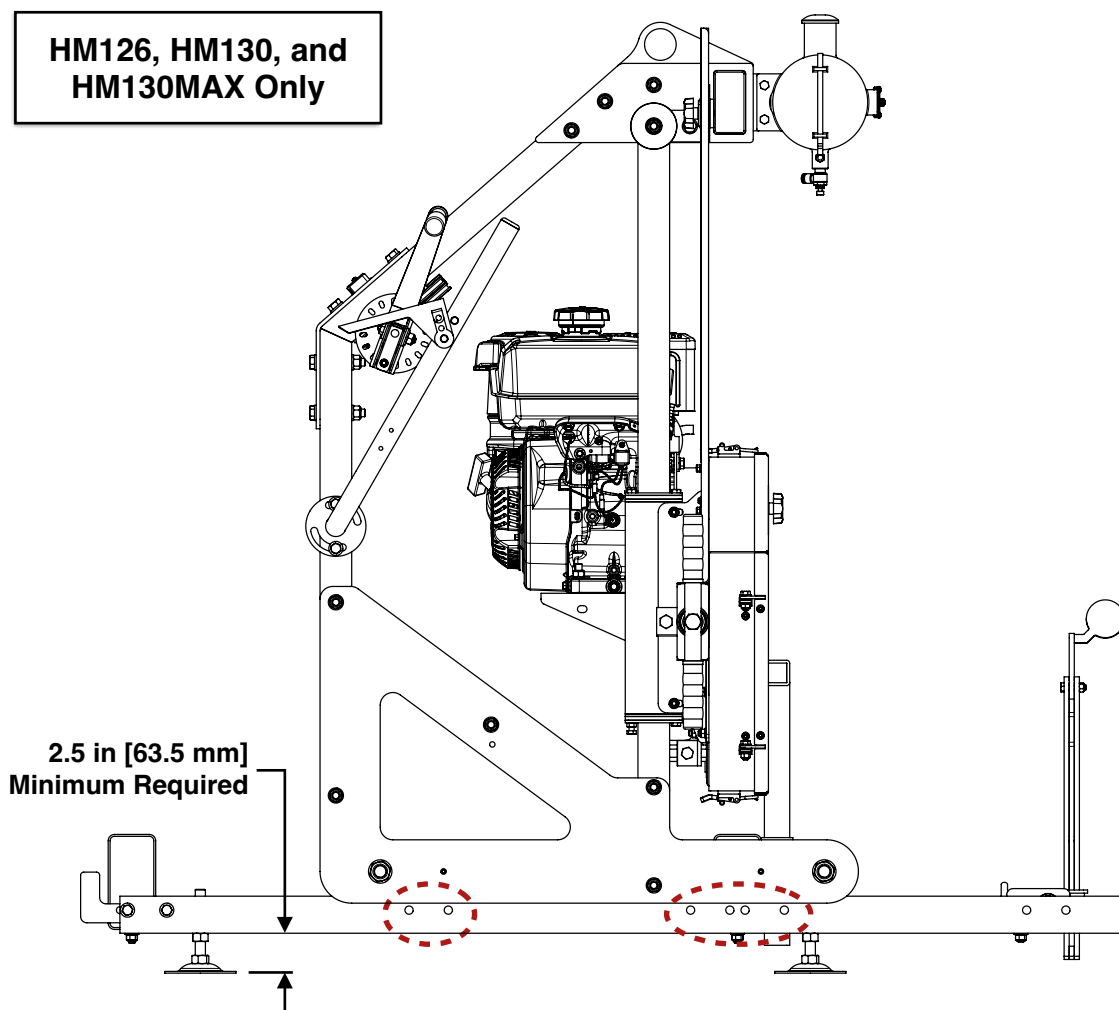
When assembling the lap siding attachment to the sawmill, do not torque the bolts to hardware Class/Grade specifications. Snug the hardware, then tighten a further $\frac{1}{4}$ — $\frac{1}{2}$ turn. Tightening bolts to torque spec can crush metal tubing, ruining the components.

2. SETUP BLOCKS

Before starting the partial disassembly of the right-side carriage leg, setup blocks must be installed on the track in order to support the weight of the carriage while components are removed in later steps.

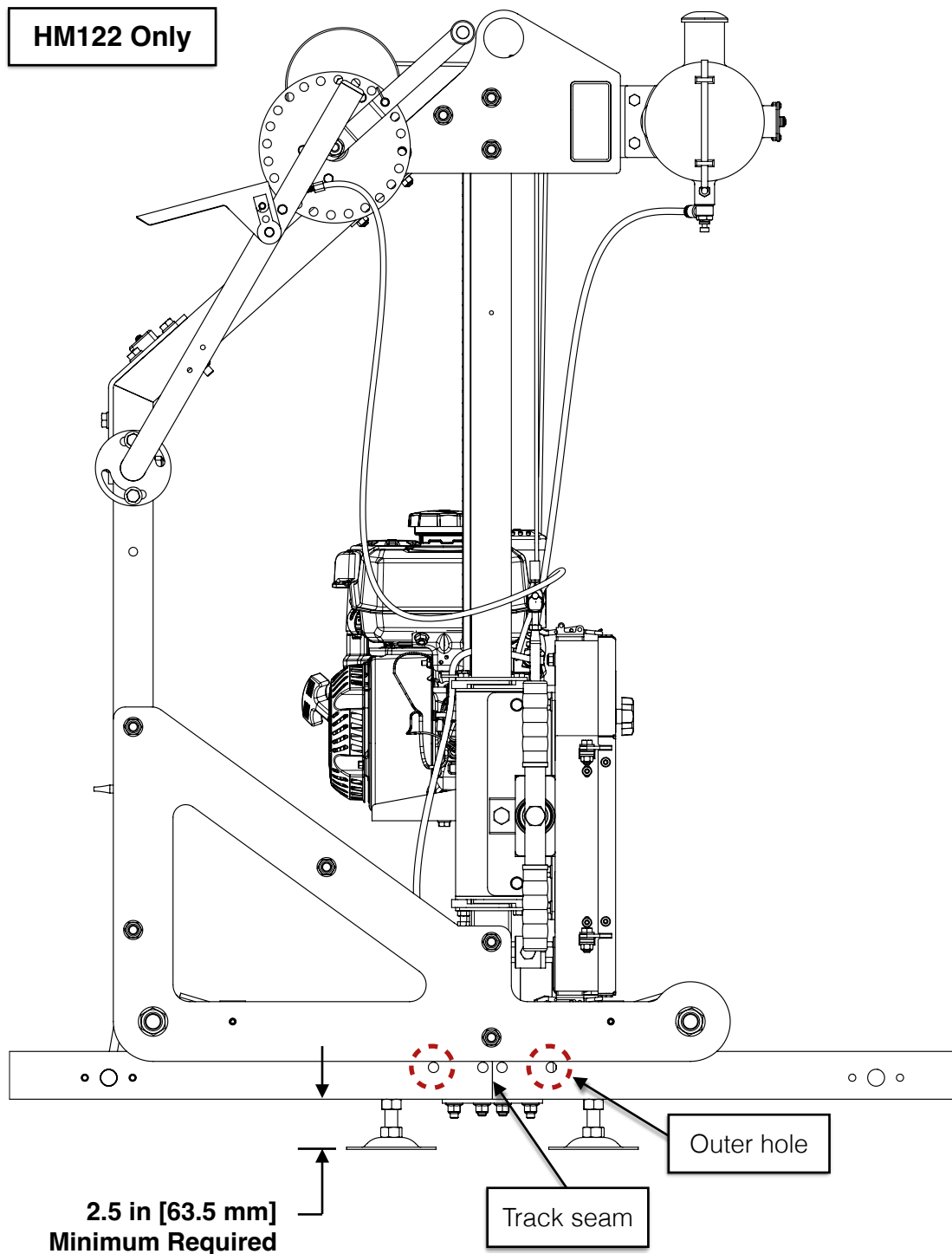
2x	M10 X 25 mm Hex Bolt		2x	Setup Block	
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For the HM126, HM130, or HM130MAX; roll the sawmill carriage until the rear carriage wheel is just behind the pair of track holes and the front carriage wheel is past the quad set of track holes.

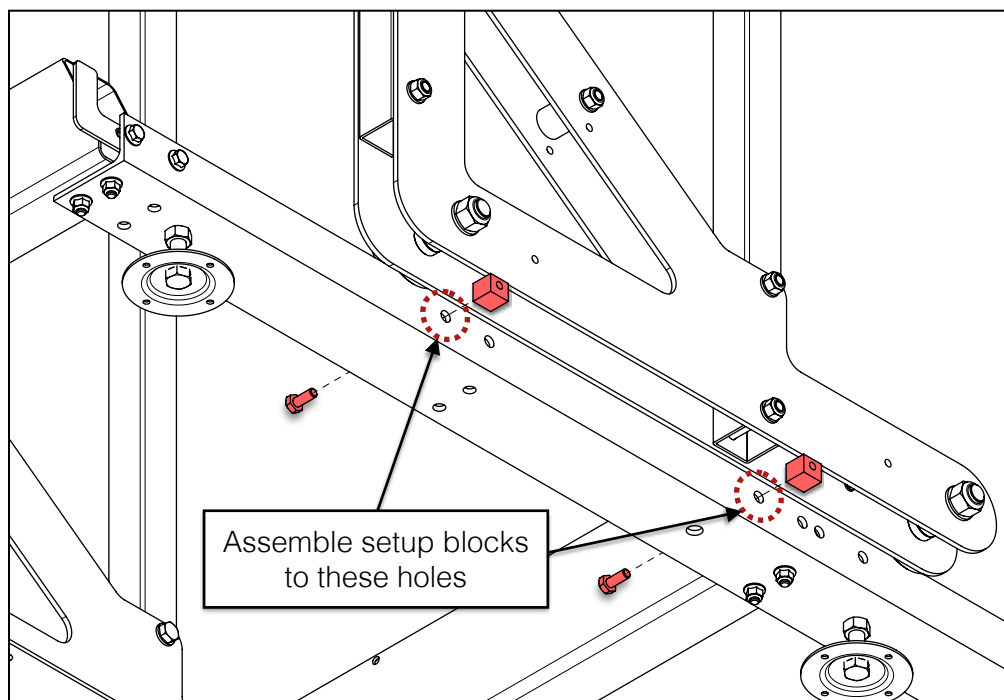


****Note: on ground-mounted sawmills, the lap siding attachment requires a minimum of 2.5 in [63.5 mm] of vertical track clearance, measured from the bottom of the track rail to the levelling foot/base.****

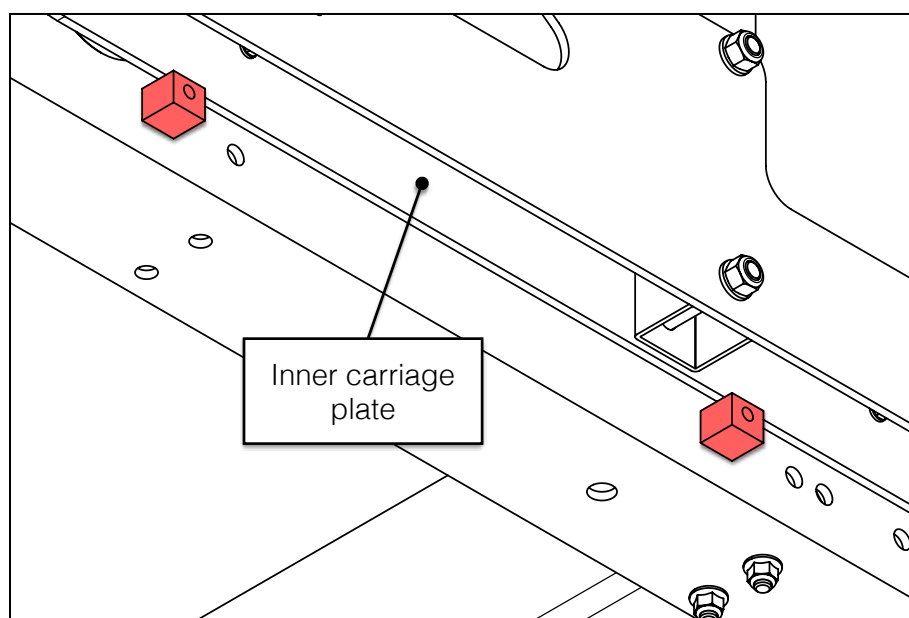
For HM122 sawmills, roll the carriage until the front carriage post is centred on of the track rail seams. The setup blocks for the HM122 will be installed on the outer two holes of the 4 hole pattern at the seam.



Assemble the two (2) setup blocks to the outer face of the track rail using two (2) M10 X 25 mm hex bolts through the holes shown below.



With the setup blocks in place, the inner carriage plate will support the weight of the sawmill carriage once the carriage wheels are removed. Note: the setup blocks sit approximately $\frac{1}{8}$ in [3 mm] lower than the inner carriage plate prior to wheel removal—this is normal.



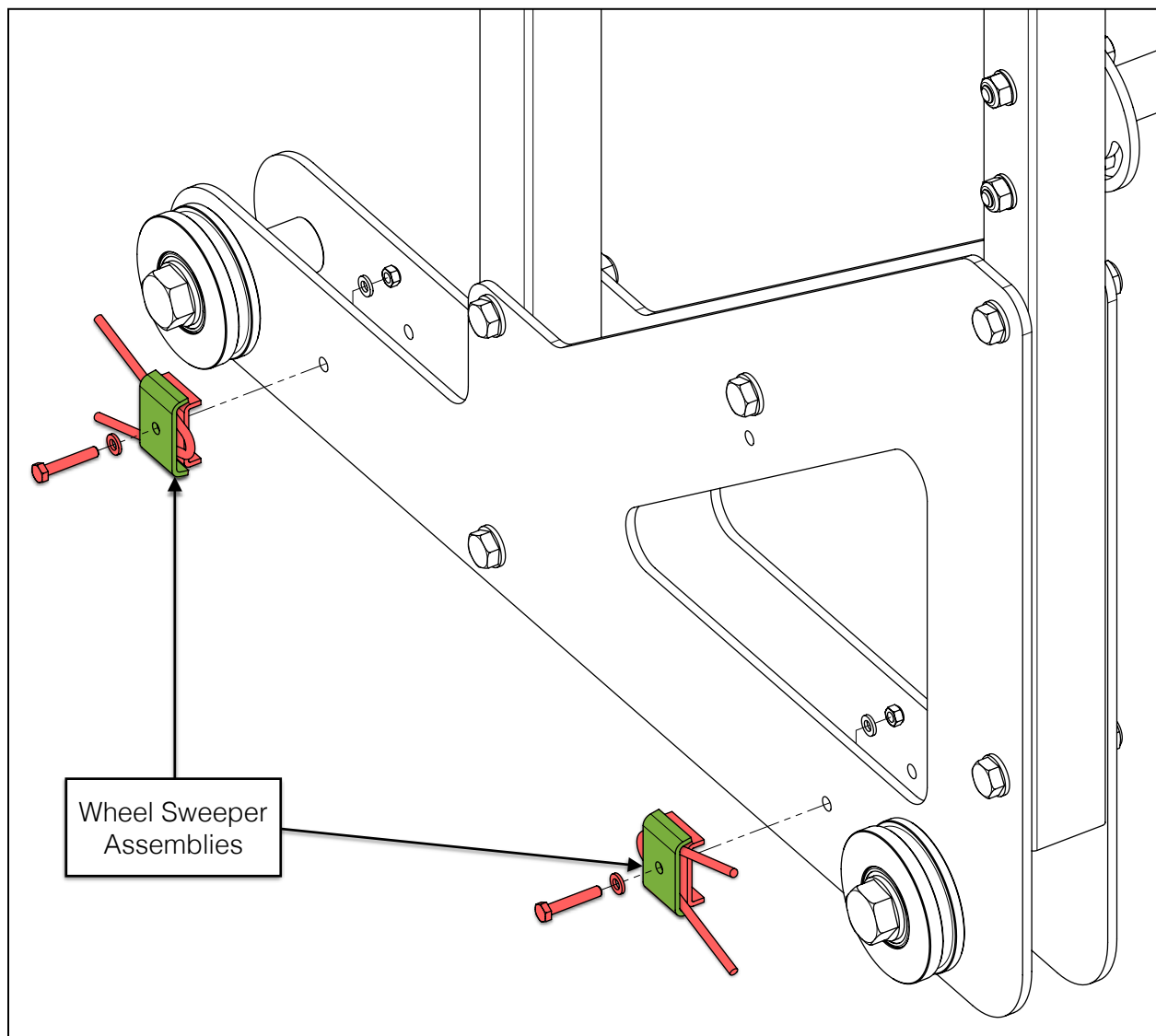
3. SAWMILL DISASSEMBLY

Some components and hardware must be removed from the sawmill before the lap siding attachment can be assembled. Be sure to store and label all these components and their associated hardware in case the lap siding attachment is removed in the future.

WHEEL SWEEPERS

Remove the two (2) wheel sweeper assemblies, two M6 X 35 mm hex bolts, four (4) M6 flat washers, and two (2) M6 lock nuts from the inside of the inner carriage plate.

****Some components removed for clarity****

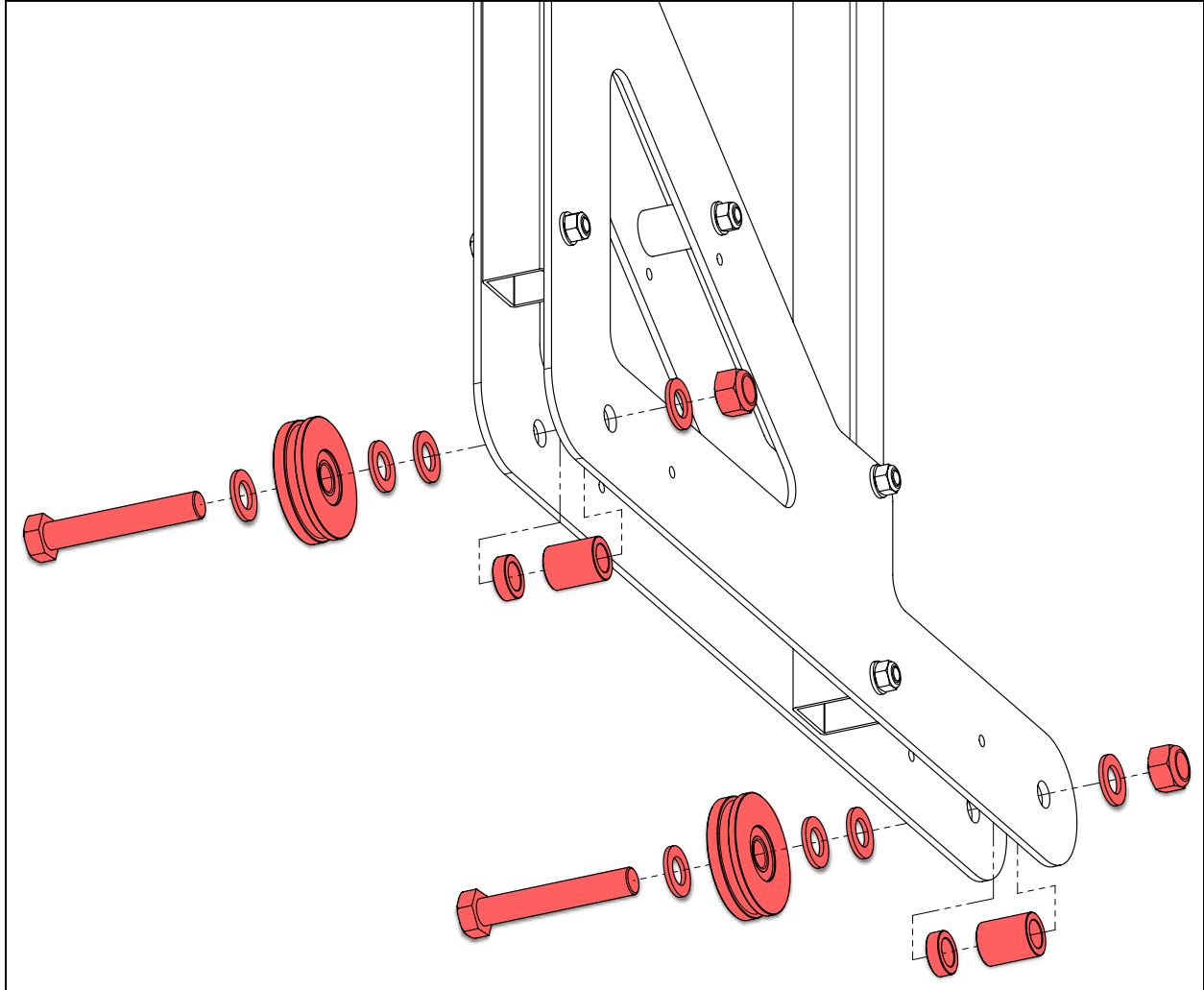


CARRIAGE WHEELS AND SPACERS

Remove the two (2) carriage wheel assemblies, four (4) spacers*, two (2) M20 X 120 mm hex bolts, eight (8) M20 flat washers, and two (2) M20 lock nuts from the right-side carriage leg.

*Note: on pre-2020 model sawmills, there may be only one (1) spacer per carriage wheel.

****Some components removed for clarity****

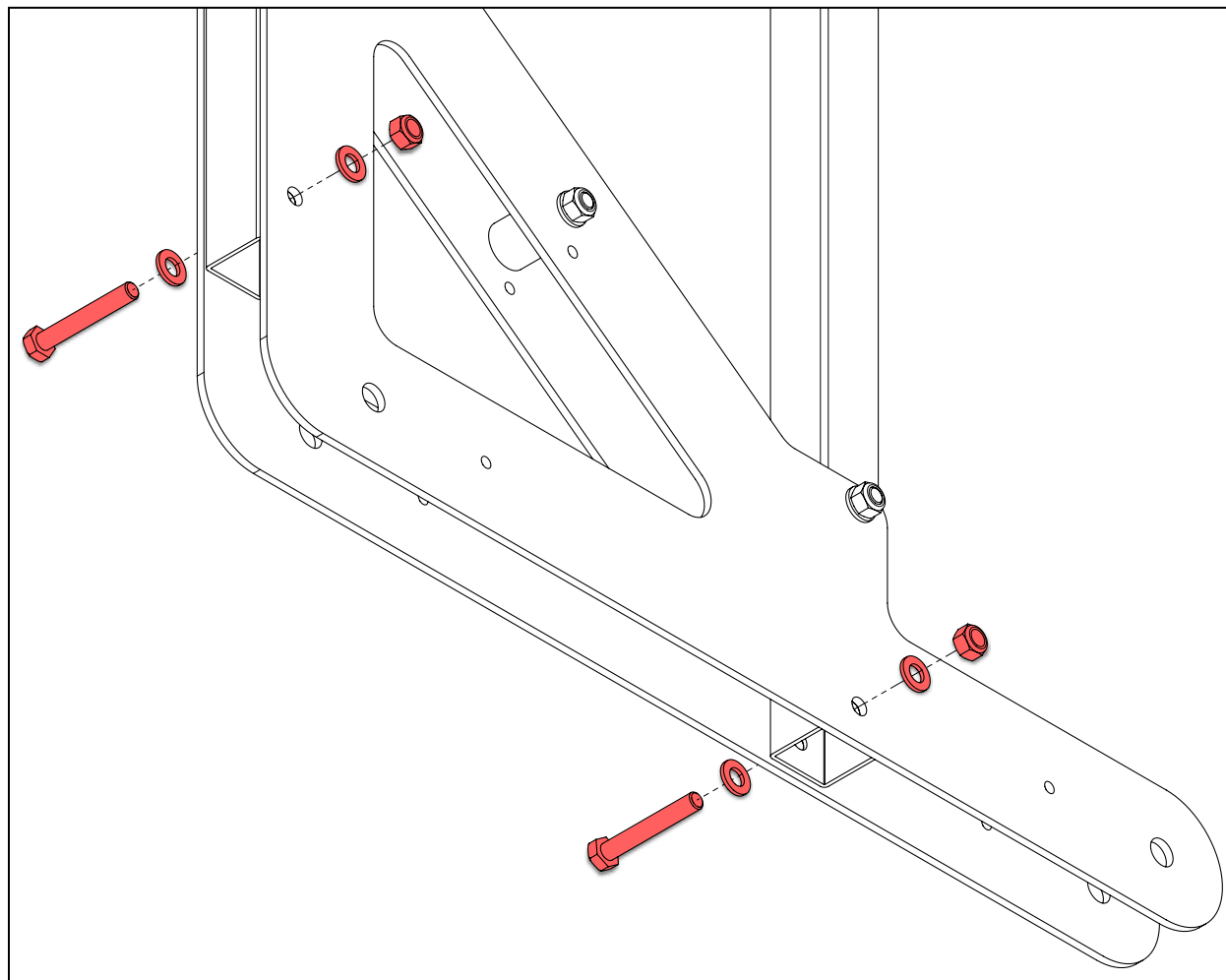


Once the carriage wheels are removed, the carriage will drop down and the inner carriage plate will rest on the setup blocks. See **Page 11** in section, **SETUP BLOCKS**, for more information.

CARRIAGE POST LOWER BOLTS

Remove the two (2) M12 X 80 mm hex bolts, four (4) M12 flat washers, and two (2) M12 lock nuts from the bottom of each right-side carriage post.

****Some components removed for clarity****



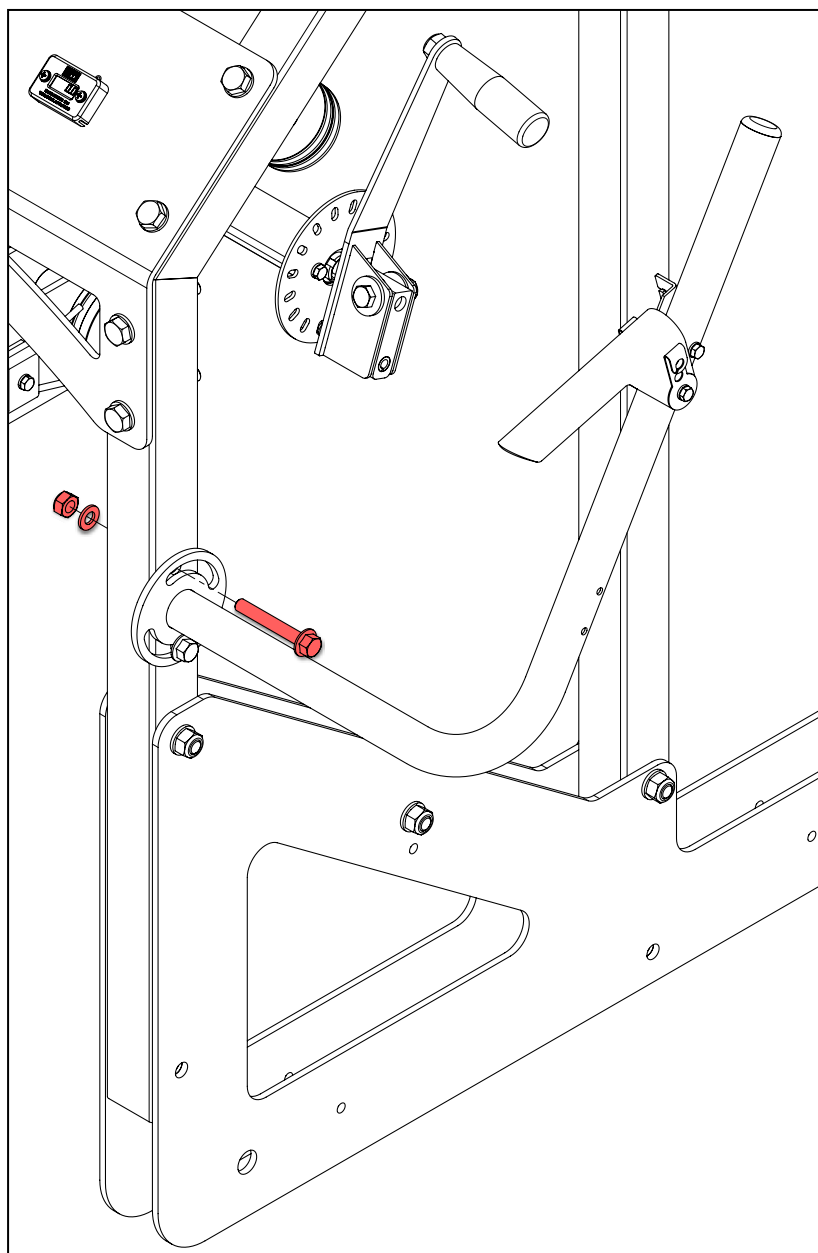
Set one (1) M12 X 80 mm hex bolt, two (2) M12 flat washers, and one (1) M12 lock nut aside to be reused on **Step 4, CHAIN ADJUSTMENT BRACKET**.

PUSH HANDLE BOLT

****Ignore this step if lap siding attachment is being installed on an HM122.****

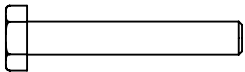

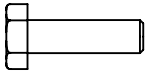
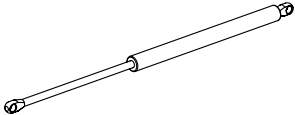

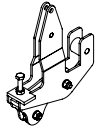
On 2020 model year sawmills, remove the upper M10 X 70 mm flanged hex bolt, M10 flat washer, and M10 lock nut from the push handle. On earlier model sawmills, remove the upper M12 X 70 mm hex bolt, M12 flat washer, and M12 lock nut from only the *lower* end of the handle.

****Some components removed for clarity****

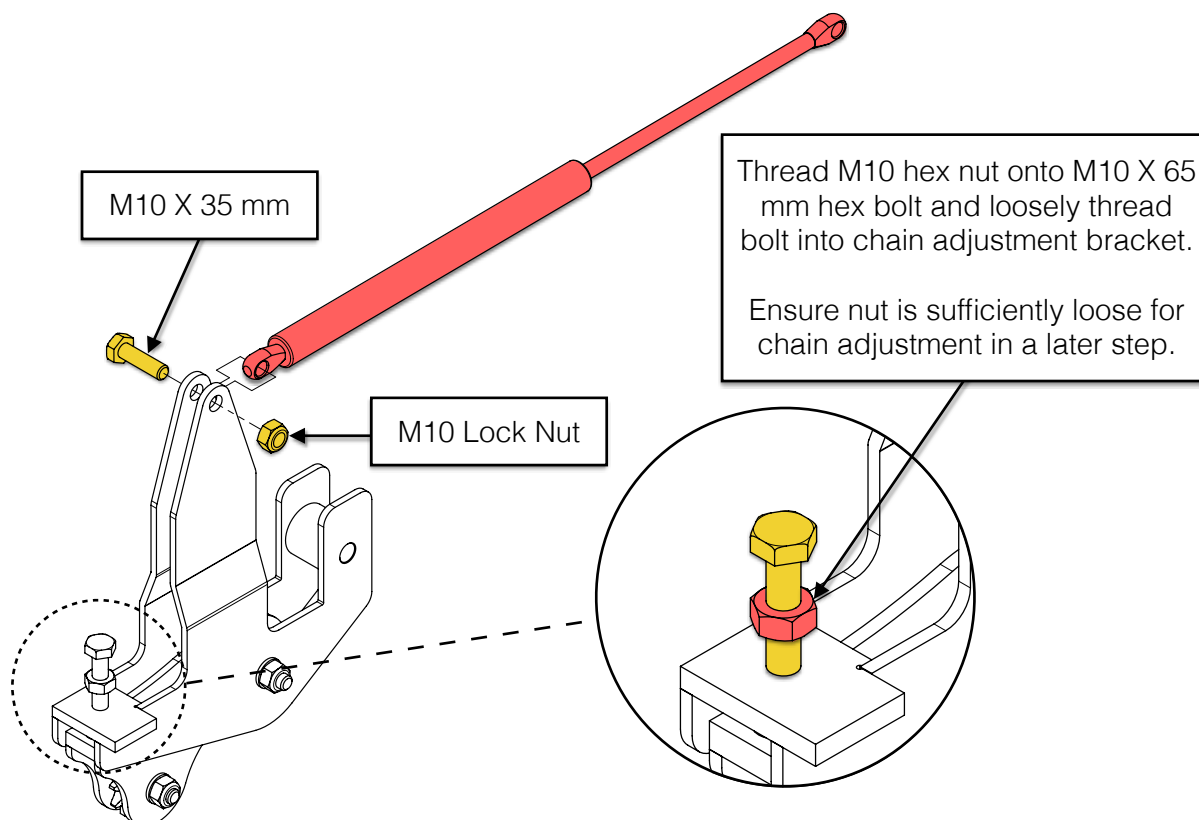


4. CHAIN ADJUSTMENT BRACKET

Using the hardware listed below, assemble the gas spring to the chain adjustment bracket.

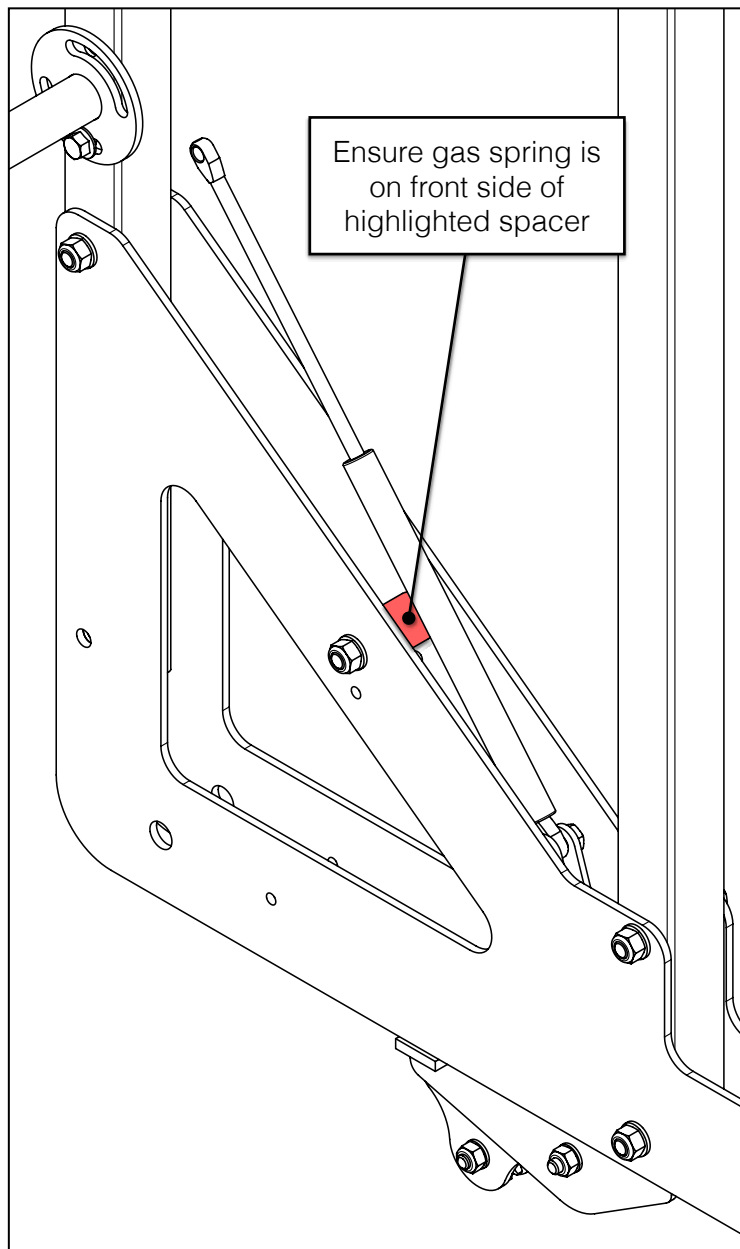
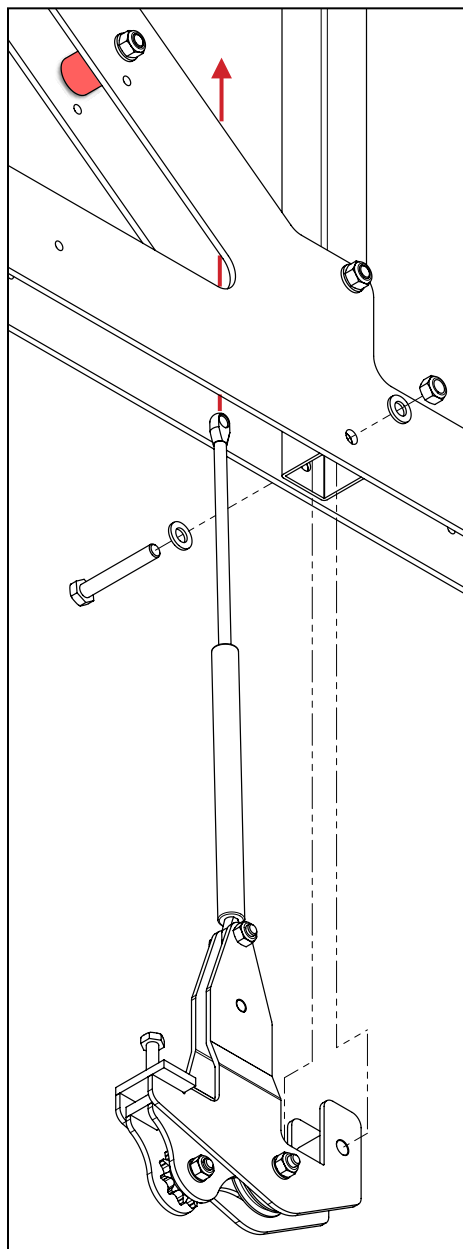
1x	M10 X 65 mm Hex Bolt		1x	M10 Hex Nut	
1x	M10 X 35 mm Hex Bolt		1x	Gas Spring	
1x	M10 Lock Nut		1x	Chain Adjustment Bracket	

Assemble the gas spring to the chain adjustment bracket using one (1) M10 X 35 hex bolt and one (1) M10 lock nut. Take care not to over-tighten the bolt to ensure the gas spring pivots with ease.



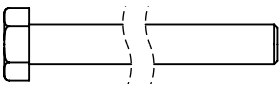
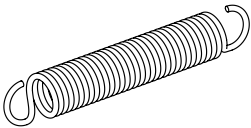
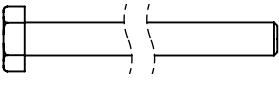
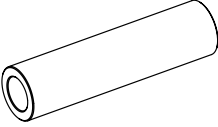
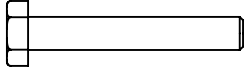
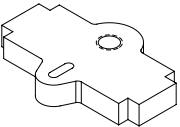
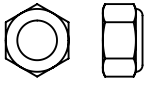
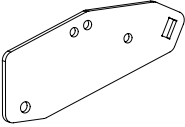

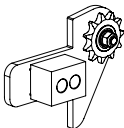
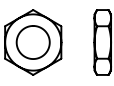
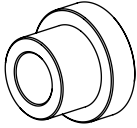

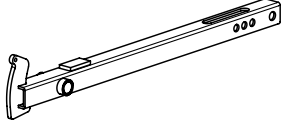

Insert the chain adjustment bracket and gas spring sub-assembly between the carriage side plates from the bottom. Insert the front tabs of the bracket up inside the front carriage post and secure it with the M12 X 80 mm hex bolt, two (2) M12 flat washers, and one (1) M12 lock nut from **Step 3, CARRIAGE POST LOWER BOLTS**.

****Some components removed for clarity****



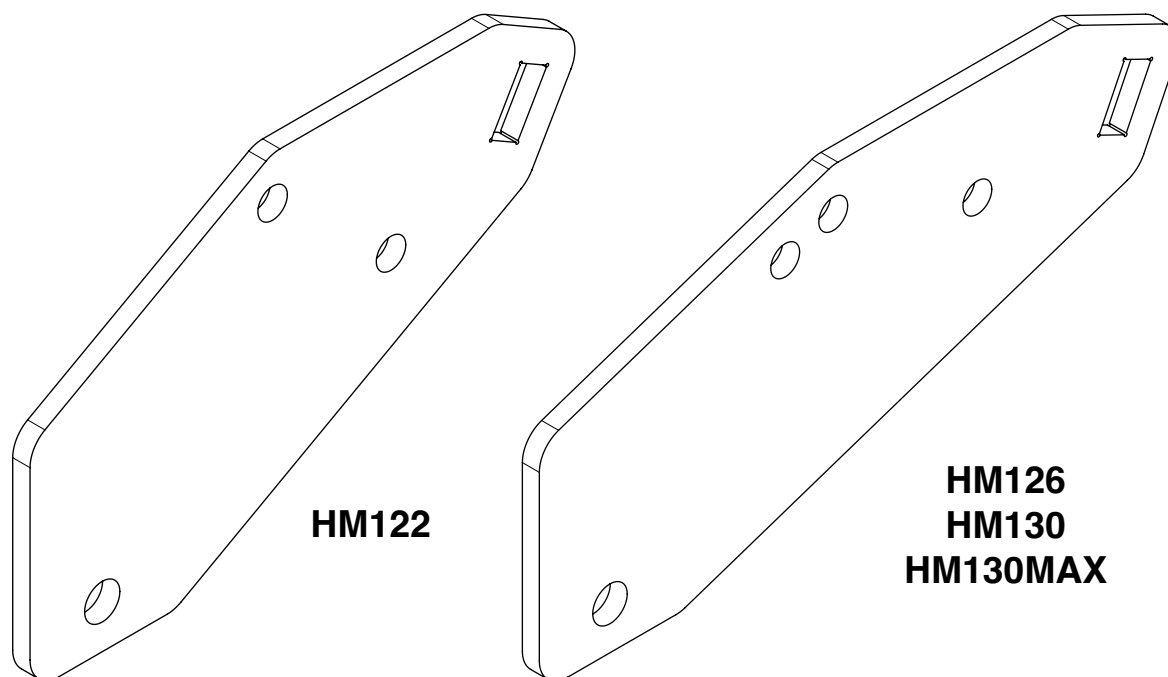
5. REAR IDLER, LEVER PLATES, & CHAIN LEVER

Using the hardware listed below, assemble the rear idler, lever plates, and chain lever to the carriage leg.

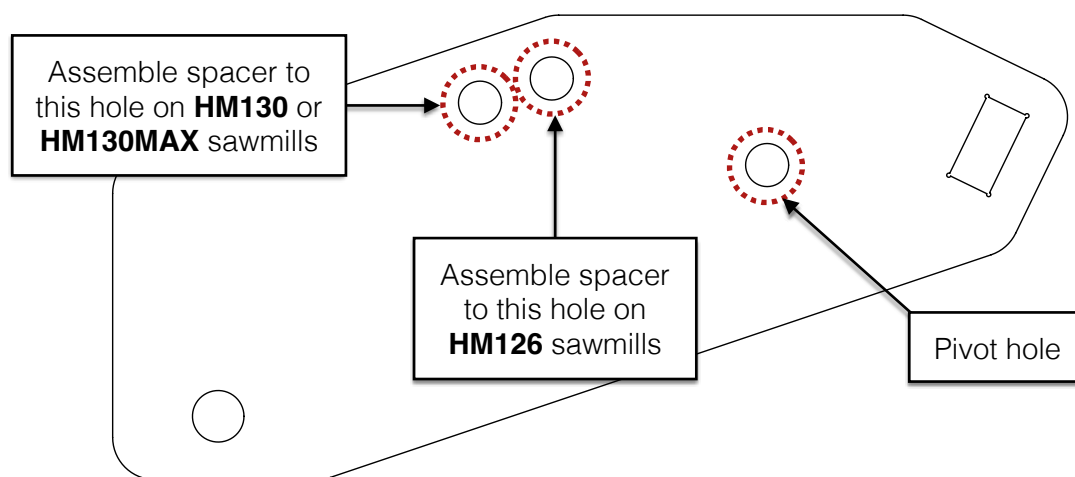
1x	M12 X 100 mm Hex Bolt		1x	Extension Spring	
2x	M10 X 90 mm Hex Bolt		1x	Spacer	
1x	M10 X 65 mm Hex Bolt		1x	Tuning Block	
1x	M12 Lock Nut		2x	Chain Lever Plate	
2x	M10 Lock Nut		1x	Rear Idler	
1x	M10 Thin Hex Nut		2x	Bushing	
2x	M12 Flat Washer		1x	Chain Lever	
4x	M10 Flat Washer				

LEVER PLATES

Depending on the sawmill model, there are two (2) different styles of lever plates. Both are installed in a similar manner using the same hardware, however, the hardware for the HM126/HM130(MAX) version must be assembled through the correct holes as indicated in the graphic at the bottom of the page.

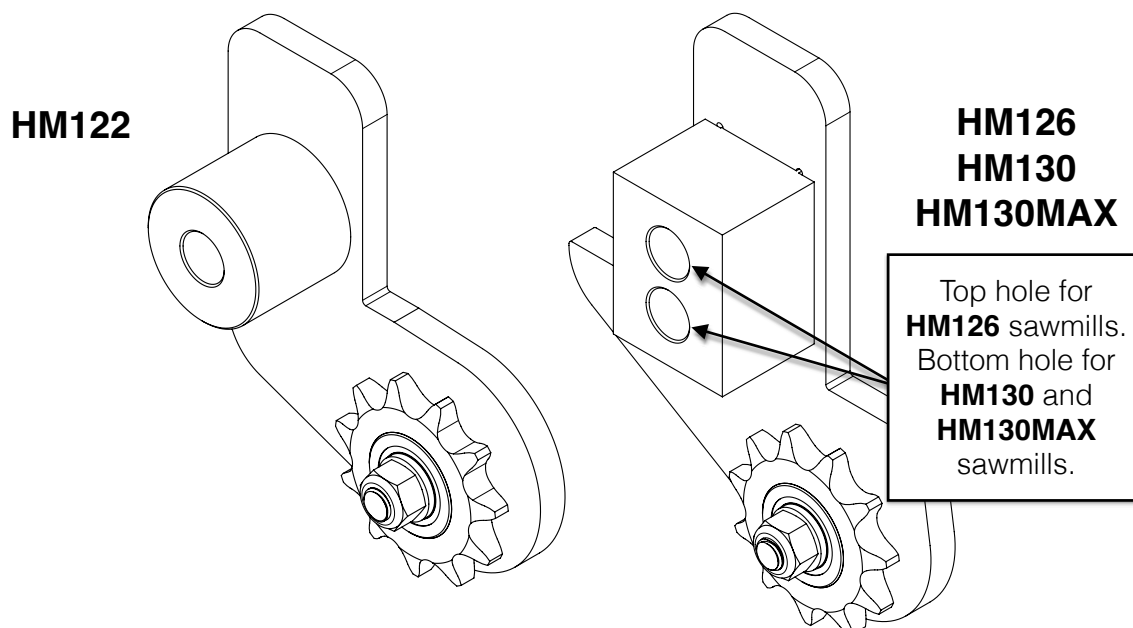


The lever plate for the HM126, HM130, and HM130MAX works with all three (3) sawmill models. Care must be taken to assemble the spacer to the proper hole in the lever plate depending on the model.



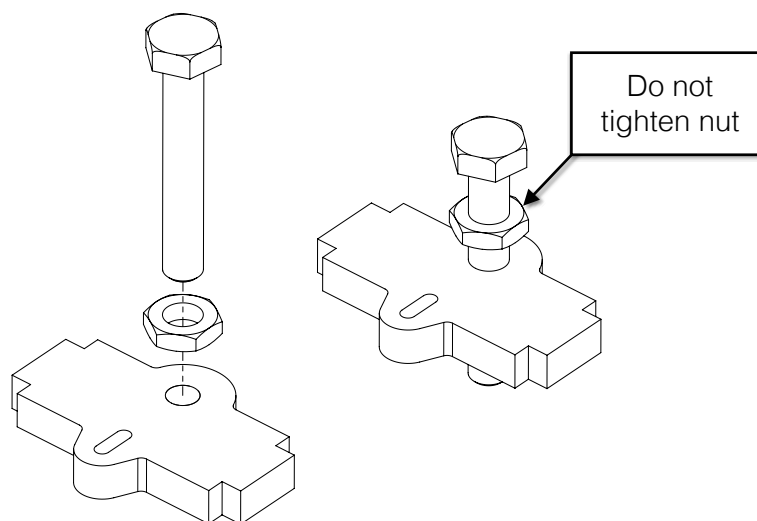
REAR IDLER

Depending on the sawmill model, there are two (2) different styles of rear idler. Both are installed in the same manner using the same hardware.



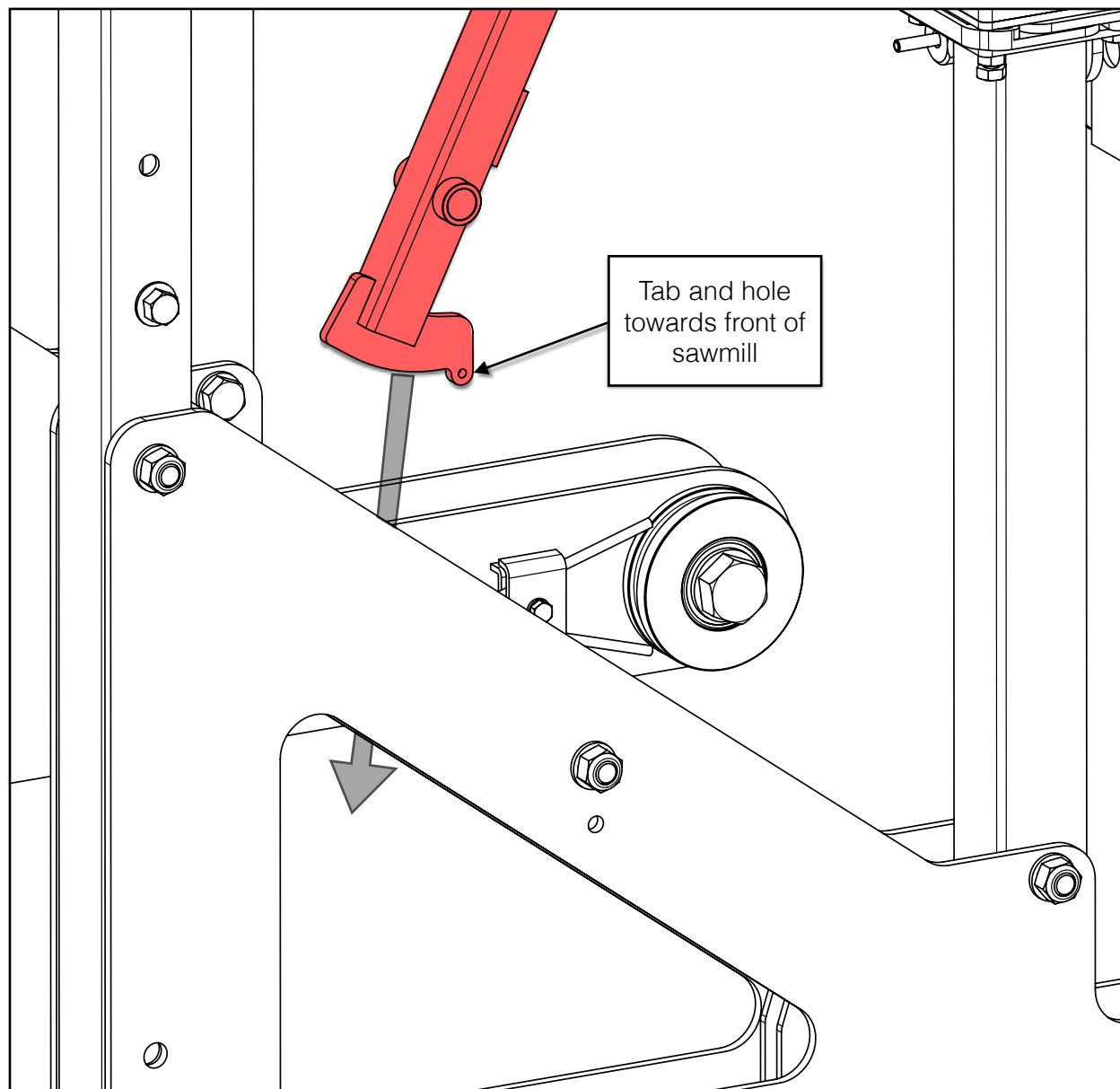
TUNING BLOCK

First, assemble the M10 X 65 mm hex bolt and M10 thin hex nut to the tuning block as shown below. Thread the bolt into the block until it passes through the other side but do not tighten the thin nut as the bolt will be adjusted in a later step.

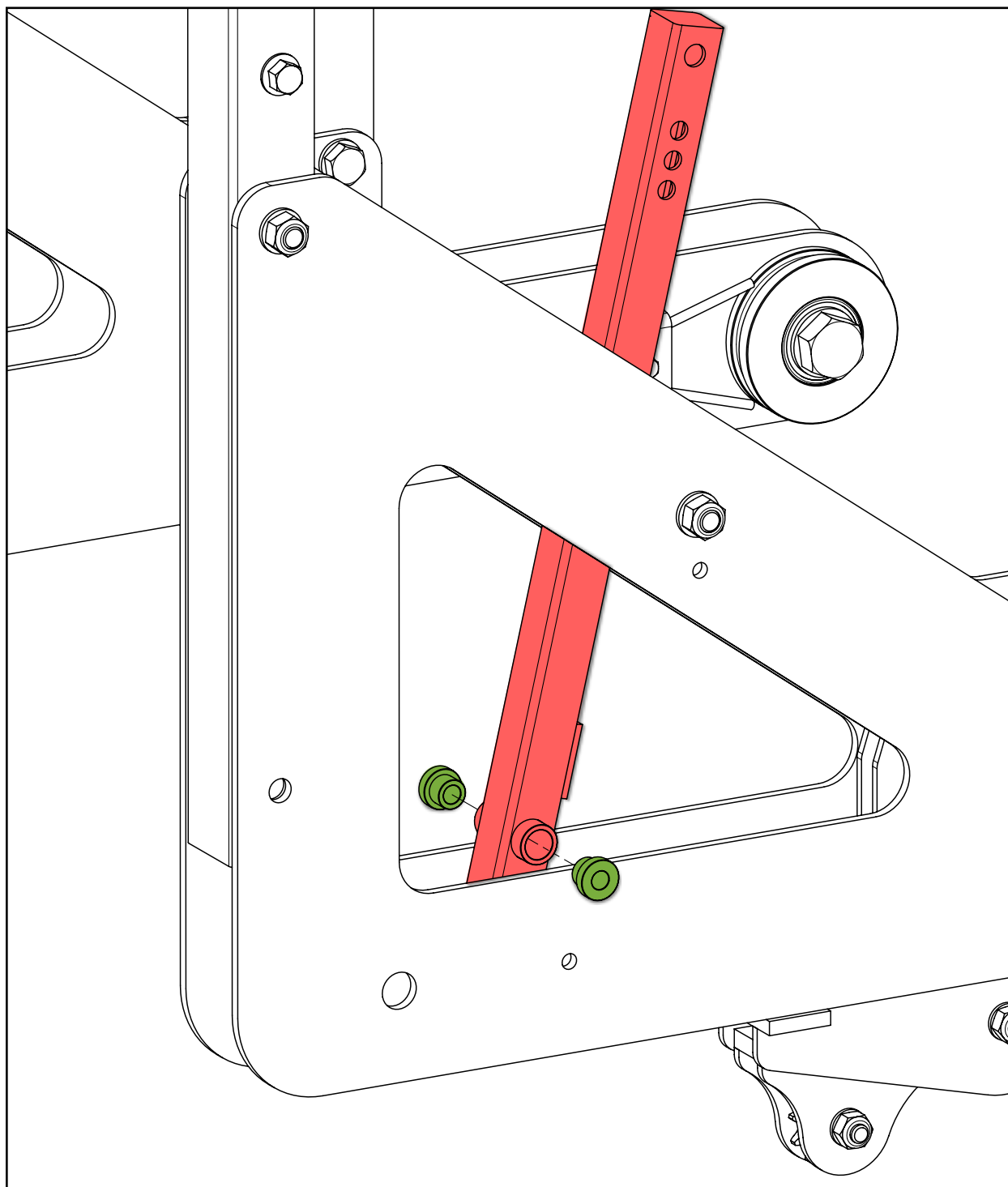


INSTALLATION

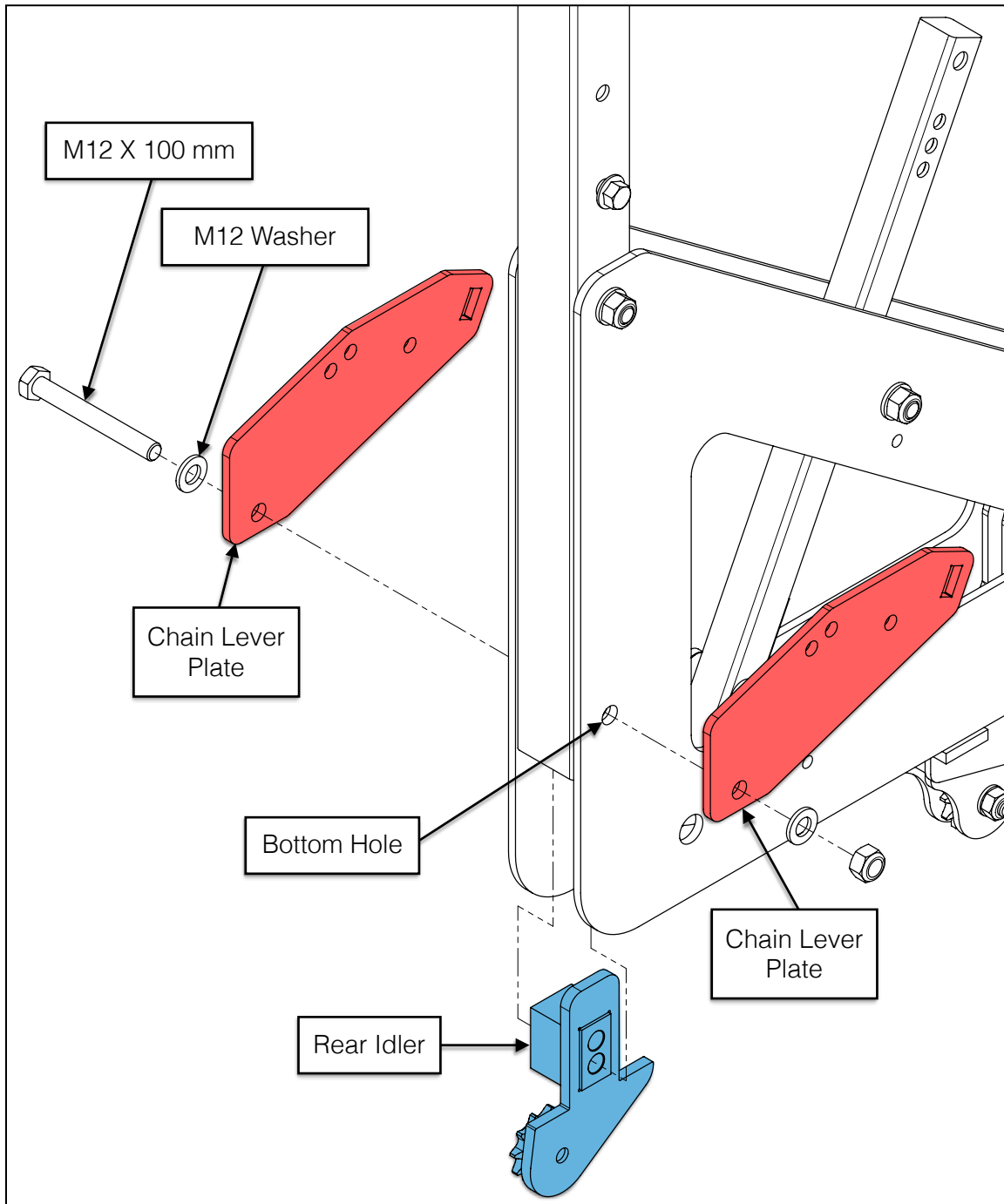
Slide the chain lever down between the carriage side plates.



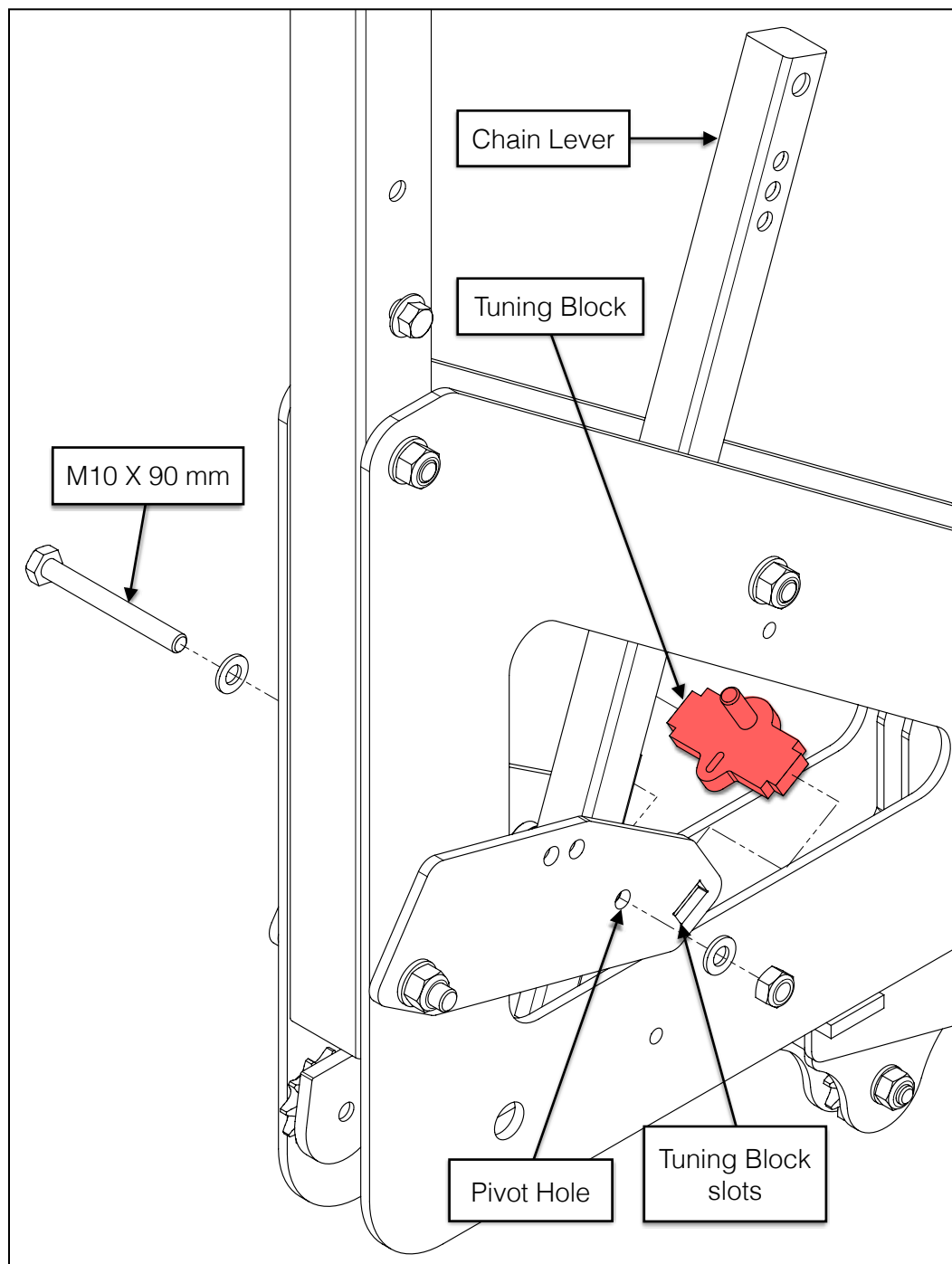
Insert the two (2) bushings into the left and right side of the chain lever.



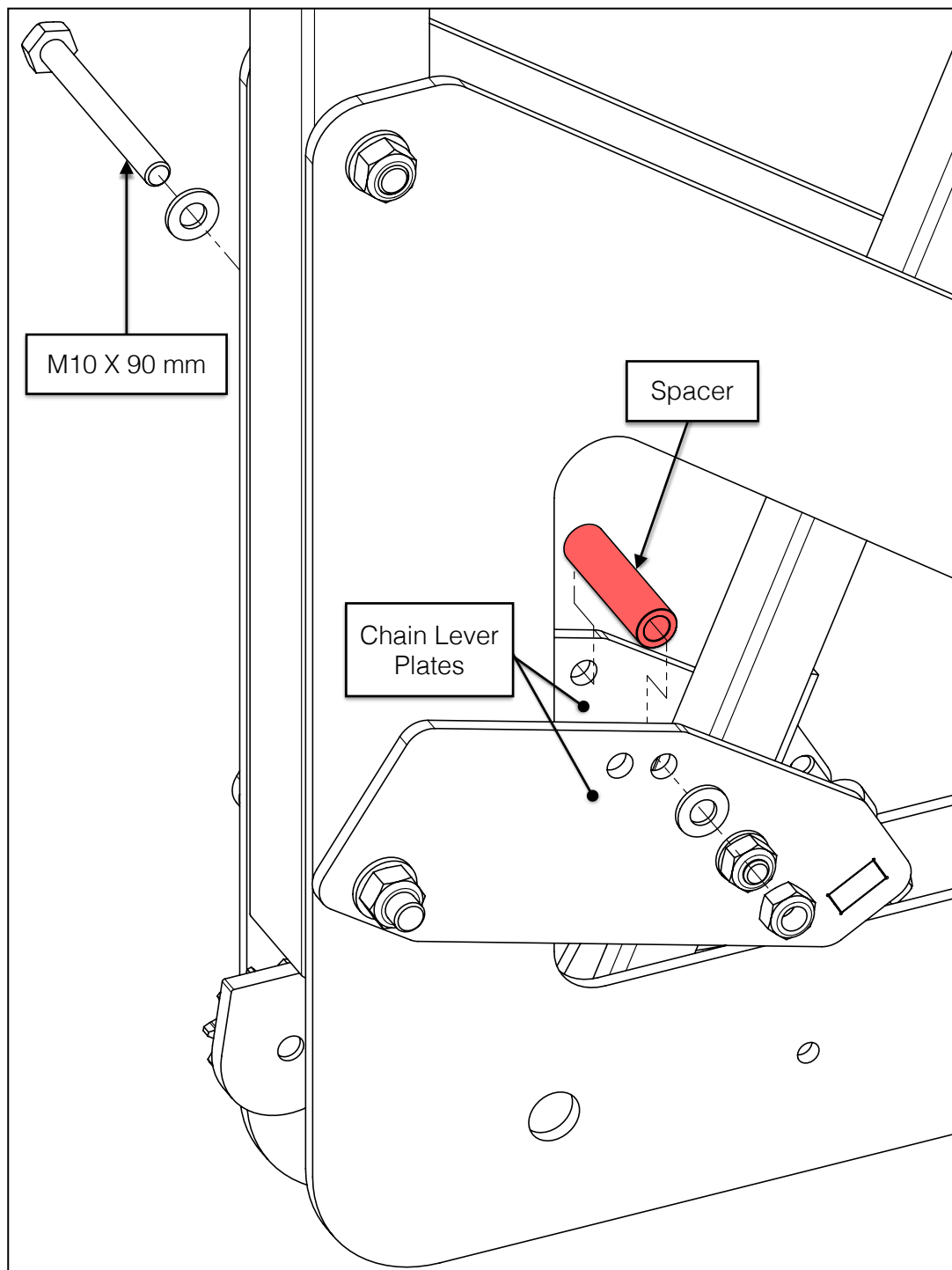
Insert one (1) M12 X 100 mm hex bolt through the bottom hole of the rear post with one (1) M12 flat washer and one (1) chain lever plate. Do not fully slide the bolt through the post. Insert the rear idler into the bottom of the post and fully slide the bolt through. Secure the remaining chain lever plate on the outside of the carriage with one (1) M12 flat washer and one (1) M12 lock nut. Do not fully tighten the hardware.



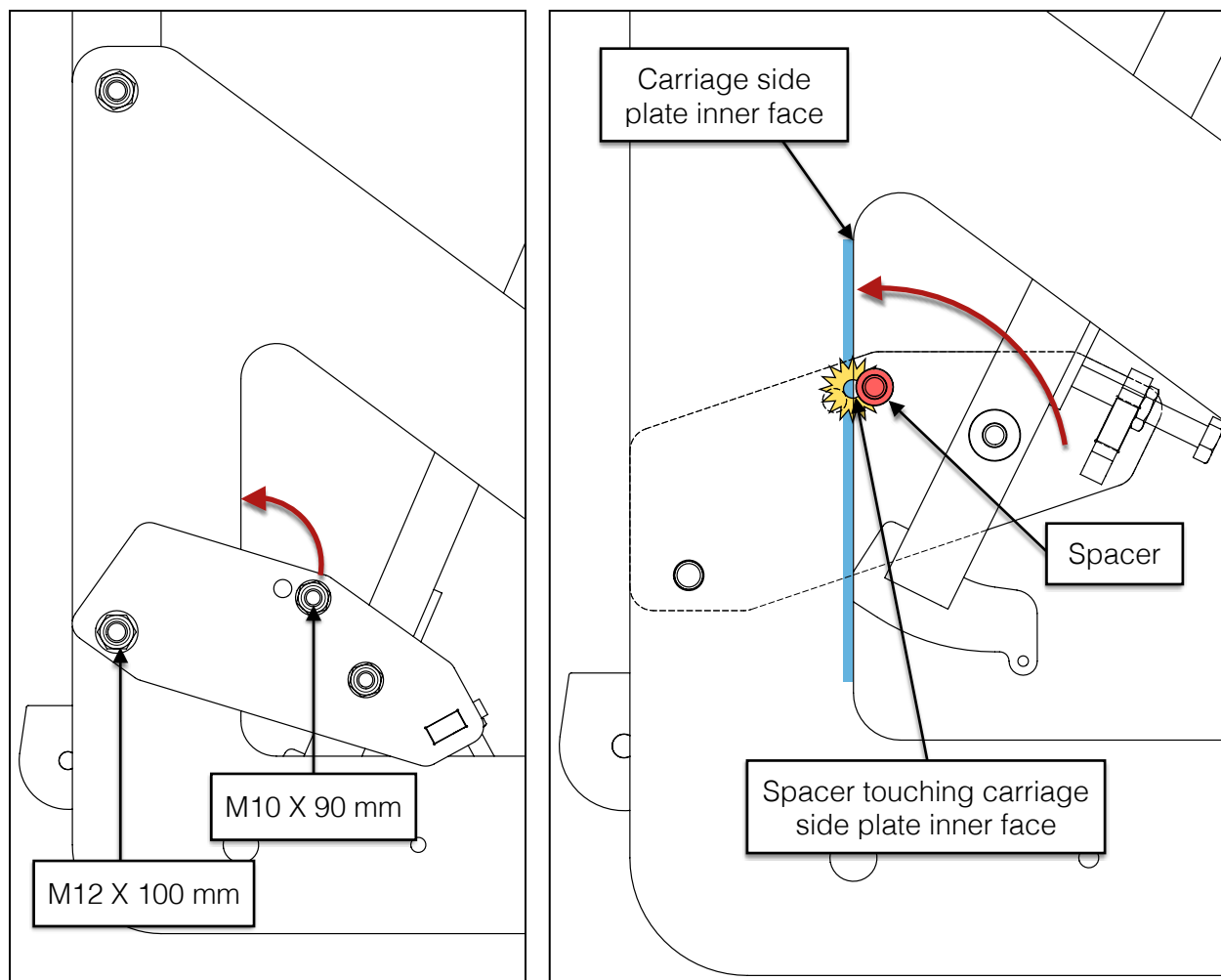
Next, slide the chain lever in between the two chain lever plates, aligning it with the pivot hole (as discussed in section, ***LEVER PLATES***, on page 21). Secure it with one (1) M10 X 90 mm hex bolt, two (2) M10 flat washers, and one (1) M10 lock nut. Do not fully tighten the hardware. Insert the tuning block into the slots in the front of the chain lever plates. Orient the tuning block as shown below.



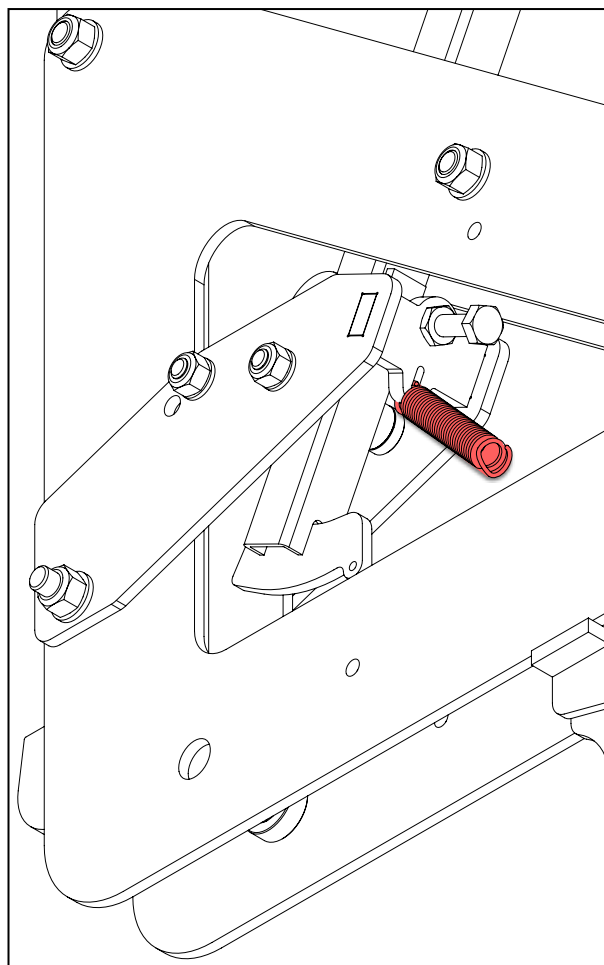
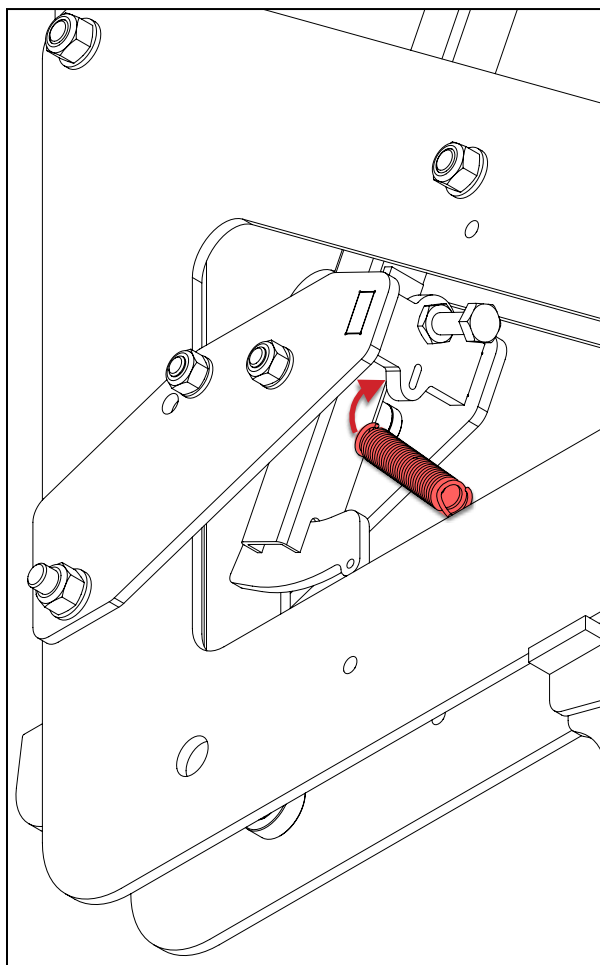
Next, position the spacer between the lever plates, aligning it with the appropriate holes in the plates (as discussed in section, ***LEVER PLATES***, on page 21). Secure it with one (1) M10 X 90 mm hex bolt, two (2) M10 flat washers, and one (1) M10 lock nut. Do not tighten the hardware.



Position the spacer and plates so that the spacer makes contact with the inner edge of the carriage side plate. Fully tighten the M10 X 90 mm hex bolt at the spacer then fully tighten the M12 X 100 mm hex bolt. Tighten the M10 X 90 mm pivot bolt so the chain lever can freely rotate forward and backward.

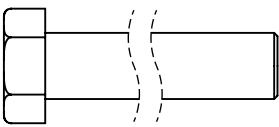
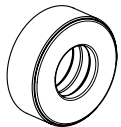
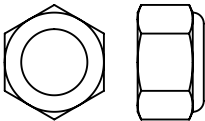
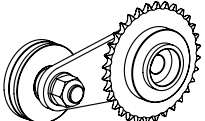
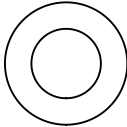


Finally, hook the extension spring onto the slot in the tuning block as shown below and allow the free end to simply hang down.

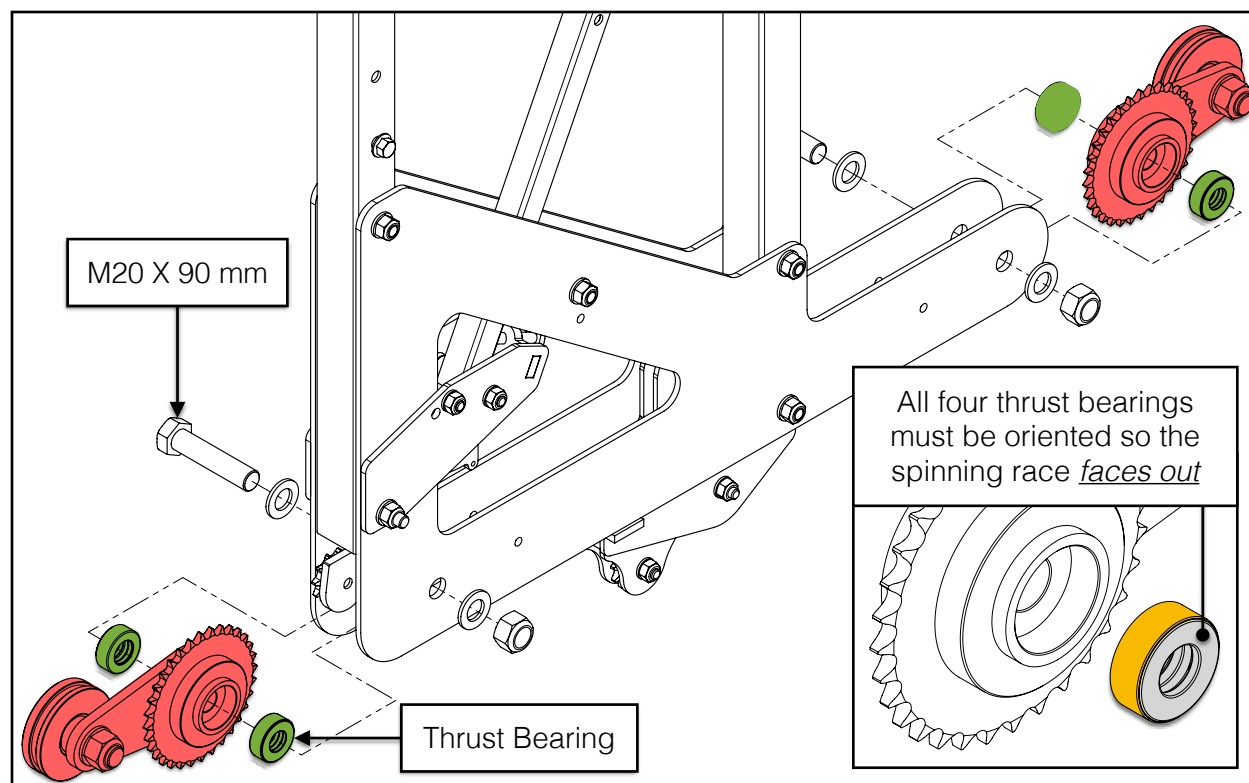


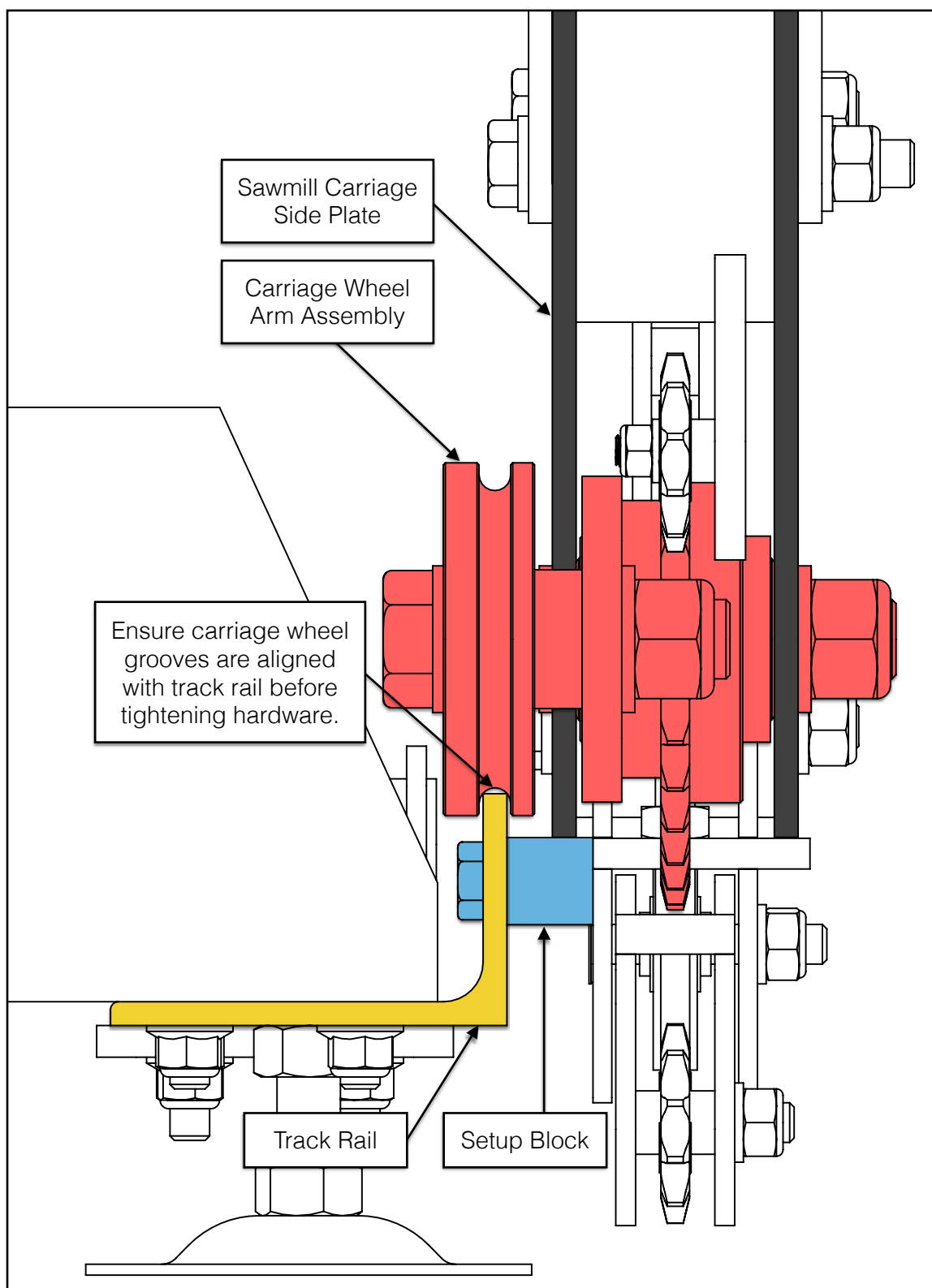
6. CARRIAGE WHEEL ARMS

Using the hardware listed below, assemble the carriage wheel arms to the carriage leg.

2x	M20 X 90 mm Hex Bolt		4x	Thrust Bearing [51204]	
2x	M20 Lock Nut		2x	Carriage Wheel Arm Sub-Assembly	
4x	M20 Flat Washer				

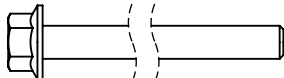
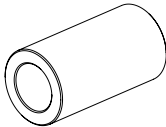

Insert two (2) thrust bearings into each carriage wheel arm and assemble them to the carriage leg, ensuring the grooves in the carriage wheels align with the track rail (see graphic on next page). Use one (1) M20 X 90 mm hex bolt, two (2) M20 flat washers, and one (1) M20 lock nut for each carriage wheel arm. Fully tighten all hardware.





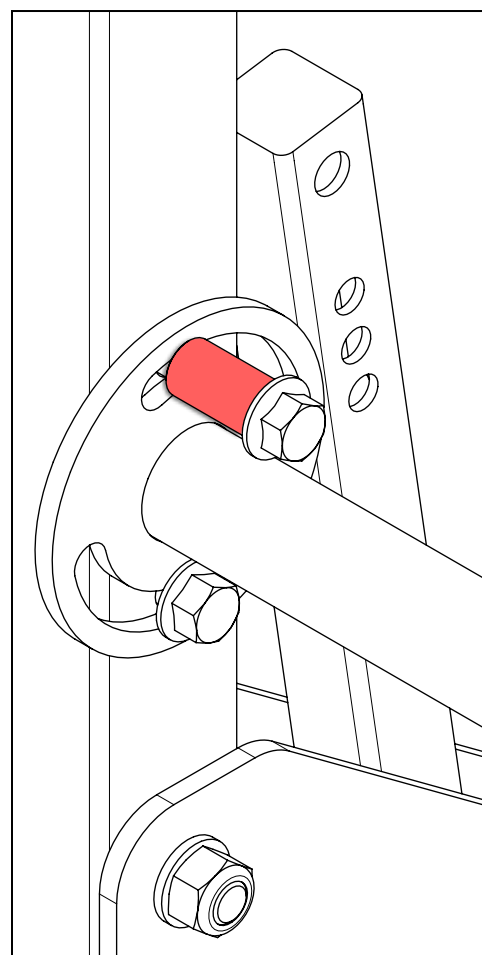
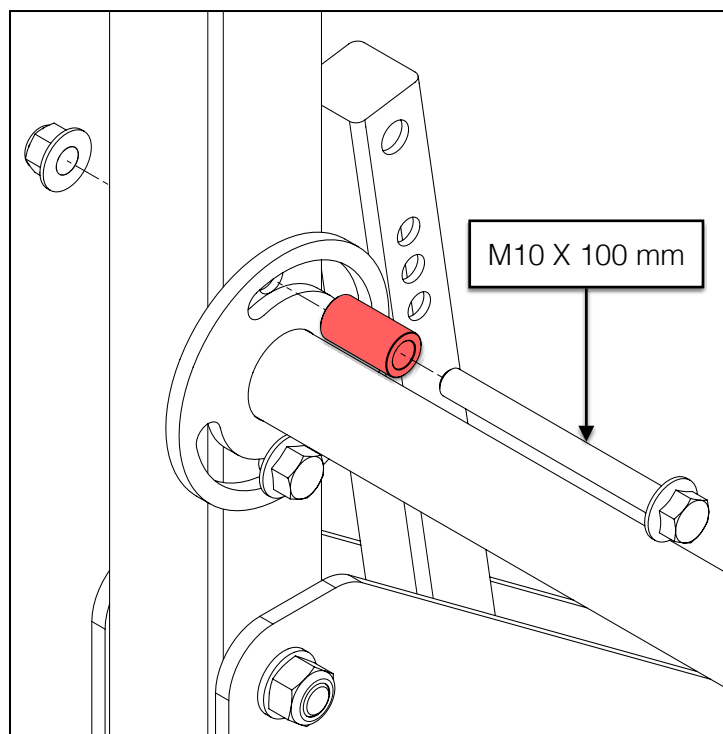
7. INDEXING HANDLE SPACER

Using the hardware listed below, assemble the indexing handle spacer to the rear carriage post.

1x	M10 X 100 mm Flanged Hex Bolt		1x	Spacer	
1x	M10 Flanged Lock Nut				

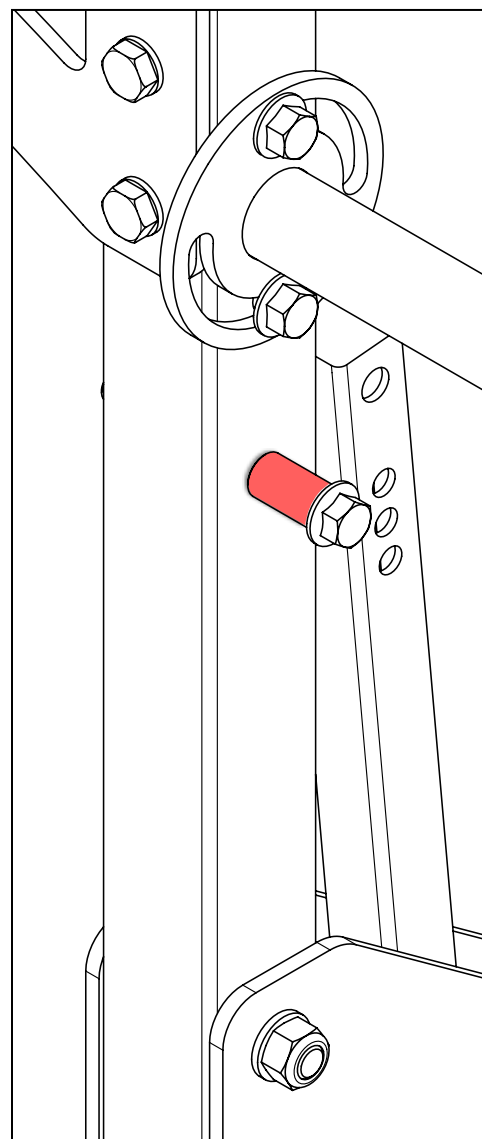
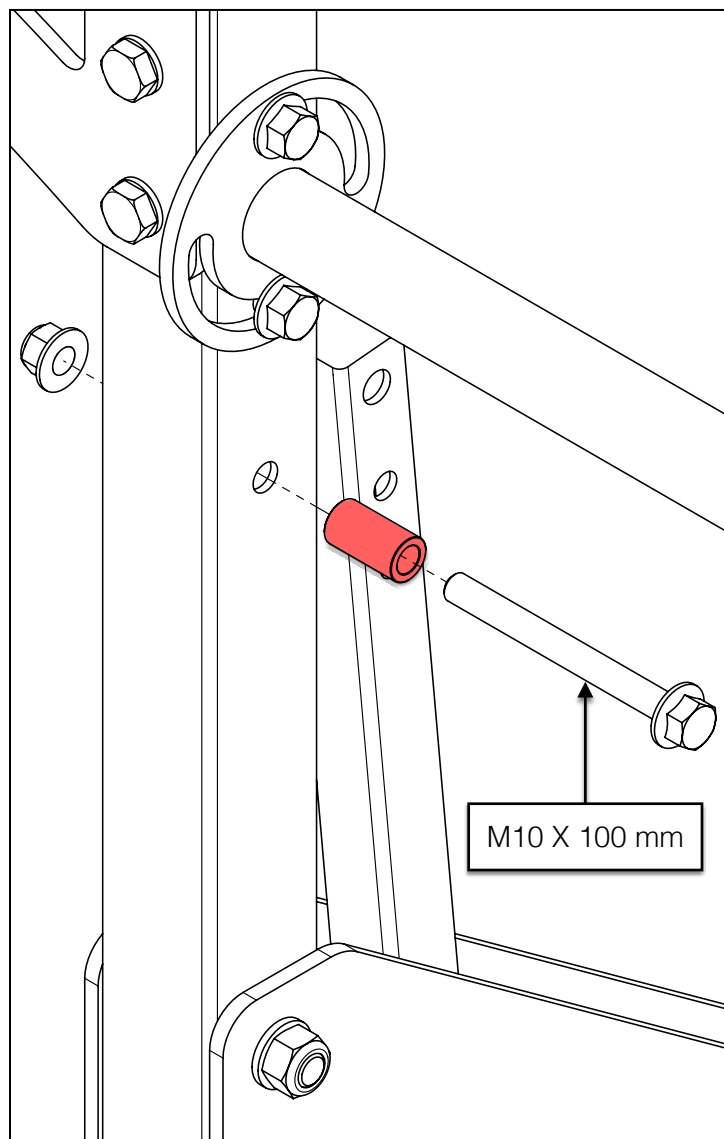
HM126, HM130 & HM130MAX INSTALLATION ONLY

Assemble the spacer to the push handle using one (1) M10 X 100 mm flanged hex bolt and one (1) M10 flanged lock nut. Fully tighten the hardware.



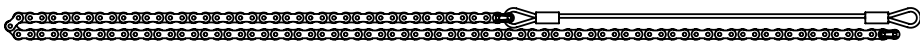
HM122 INSTALLATION ONLY

Assemble the spacer to the rear carriage post beneath the push handle using one (1) M10 X 100 mm flanged hex bolt and one (1) M10 flanged lock nut. Fully tighten the hardware.

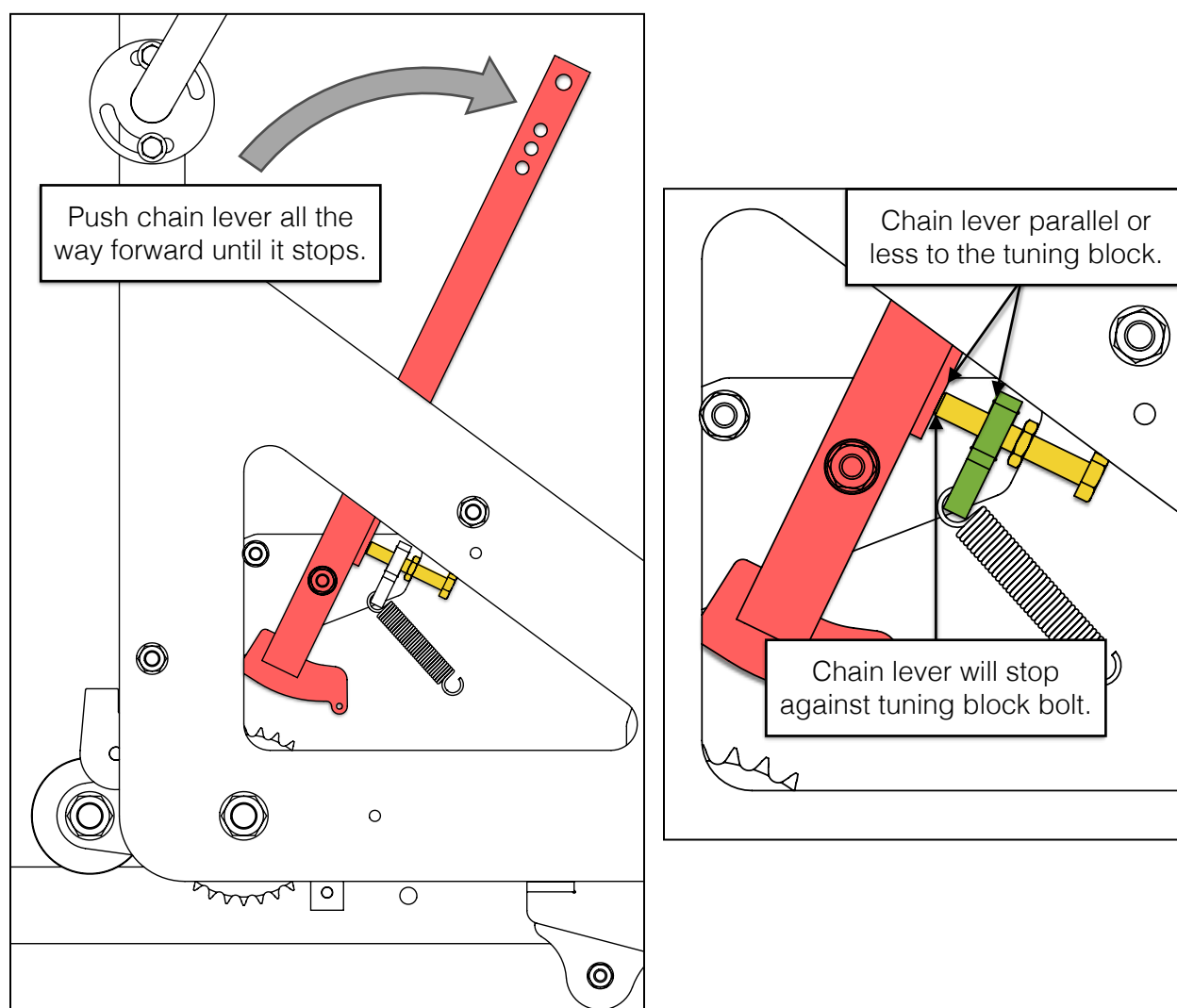


8. CABLE CHAIN

Route the cable chain and connect it to the lap siding linkage as outlined in the steps below.

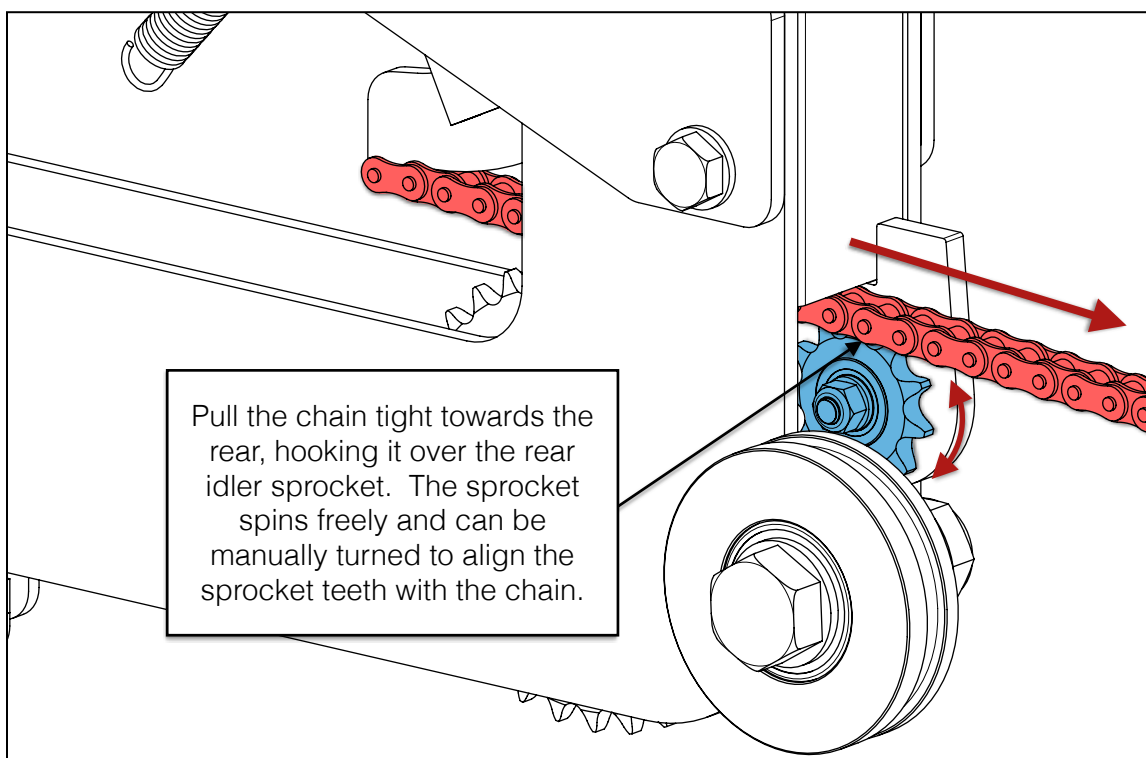
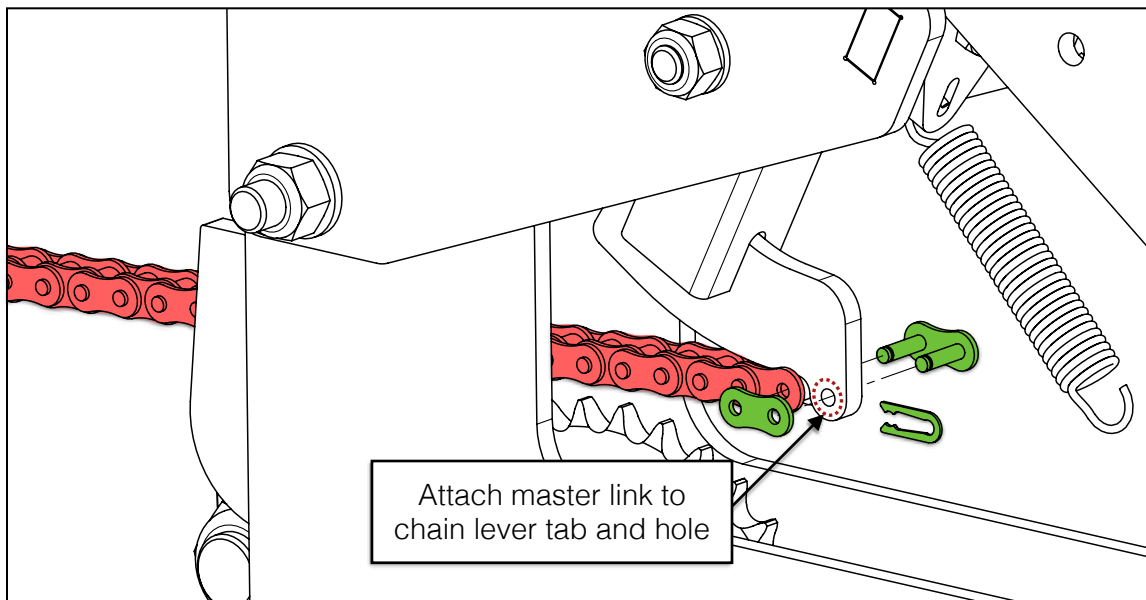
1x	Cable Chain	
----	-------------	--

Push the chain lever all the way forward until it stops against the bolt in the tuning block. Ensure that the chain lever is parallel to the tuning block or less (towards the front of the sawmill).

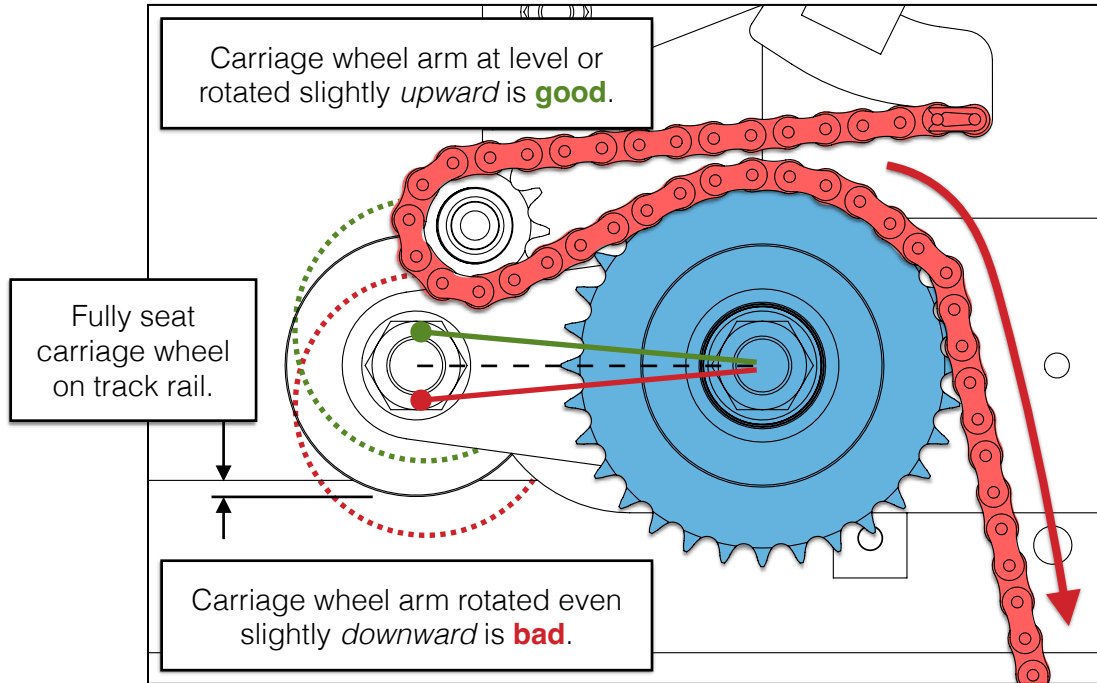


****Note that several components have been removed from the cable chain routing images throughout this step for clarity.****

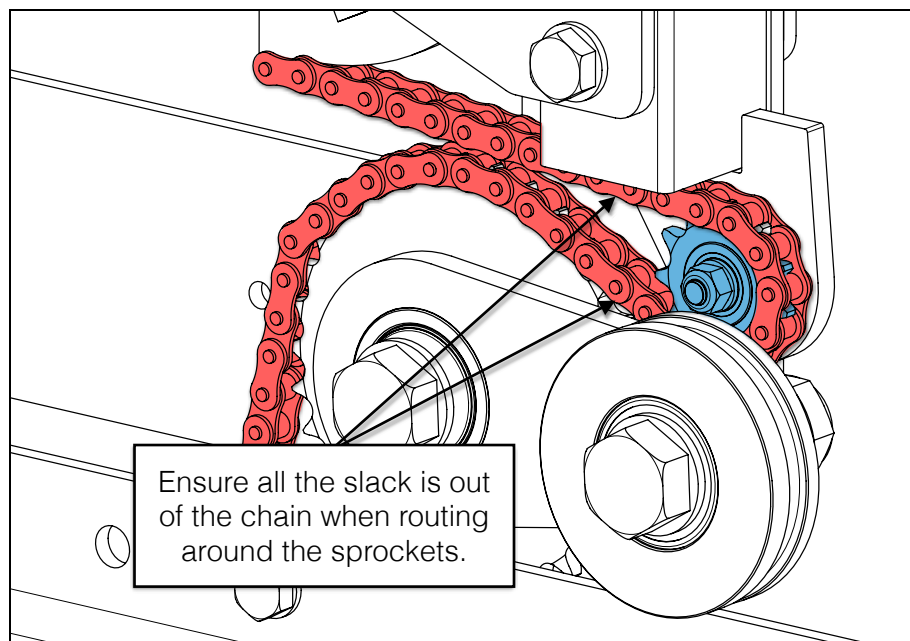
Remove the master link from the open end of the cable chain. Starting from the back of the machine, route the chain between the carriage legs and over top of the rear idler sprocket. Connect the chain to the bottom of the chain lever with the master link as shown below.



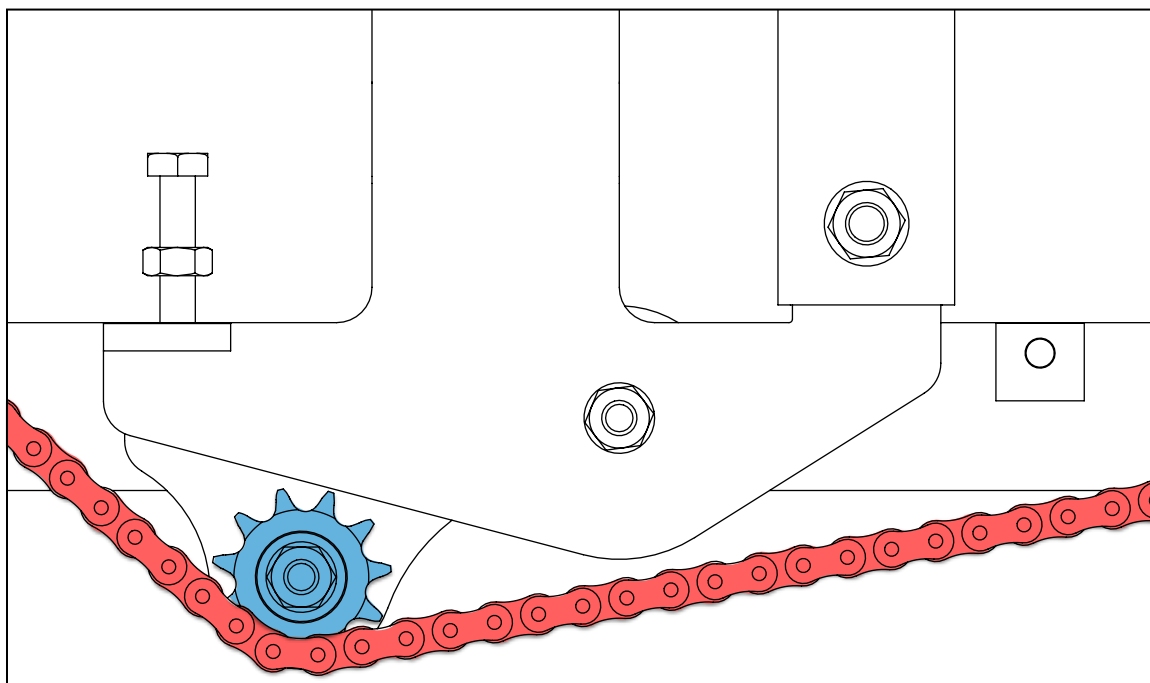
The groove in the carriage wheel must be seated down on the track rail as far as it will go. Route the cable chain around the rear sprocket and then over top of the rear carriage wheel arm, ensuring all the slack is out of the chain while doing so.



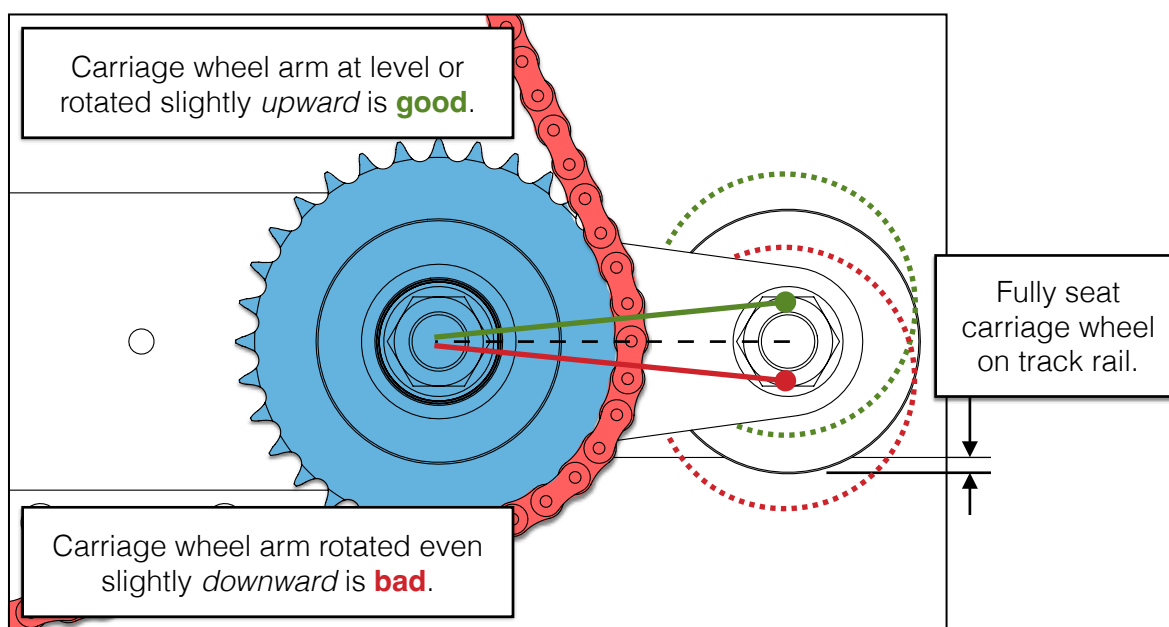
If the arm is rotated even slightly downward, remove the chain from the arm sprocket, rotate the arm until it is level or pointing just slightly upward, and then reset the chain.



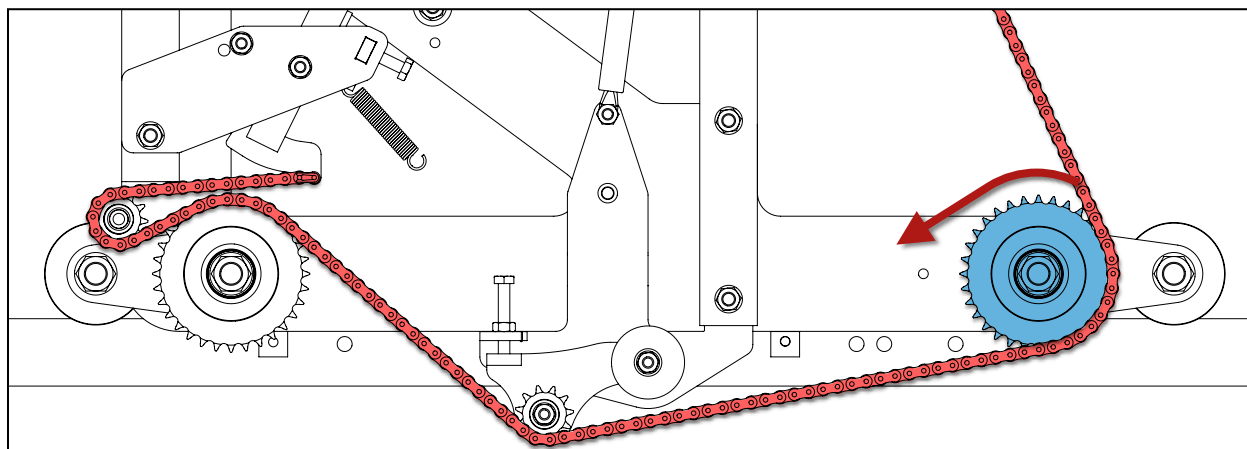
Continue to route the chain under the lower sprocket and then around the outside of the front carriage wheel arm, ensuring as much slack is out of the chain as possible.



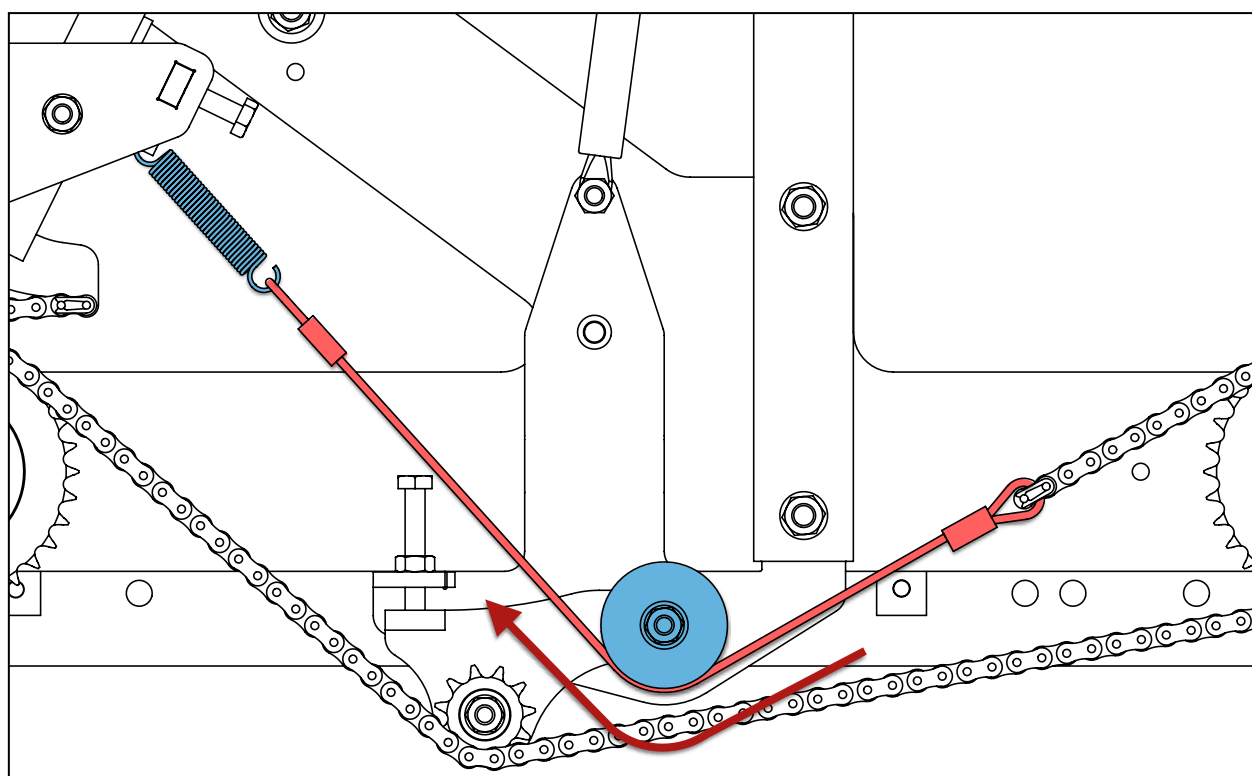
Like the rear carriage wheel, the groove in the front carriage wheel must also be seated down on the track rail as far as it will go. If the arm is rotated even slightly downward, remove the chain from the arm sprocket, rotate the arm until it is level or pointing just slightly upward, and then reset the chain.



Route the remainder of the chain portion around the front side of the carriage wheel arm sprocket.

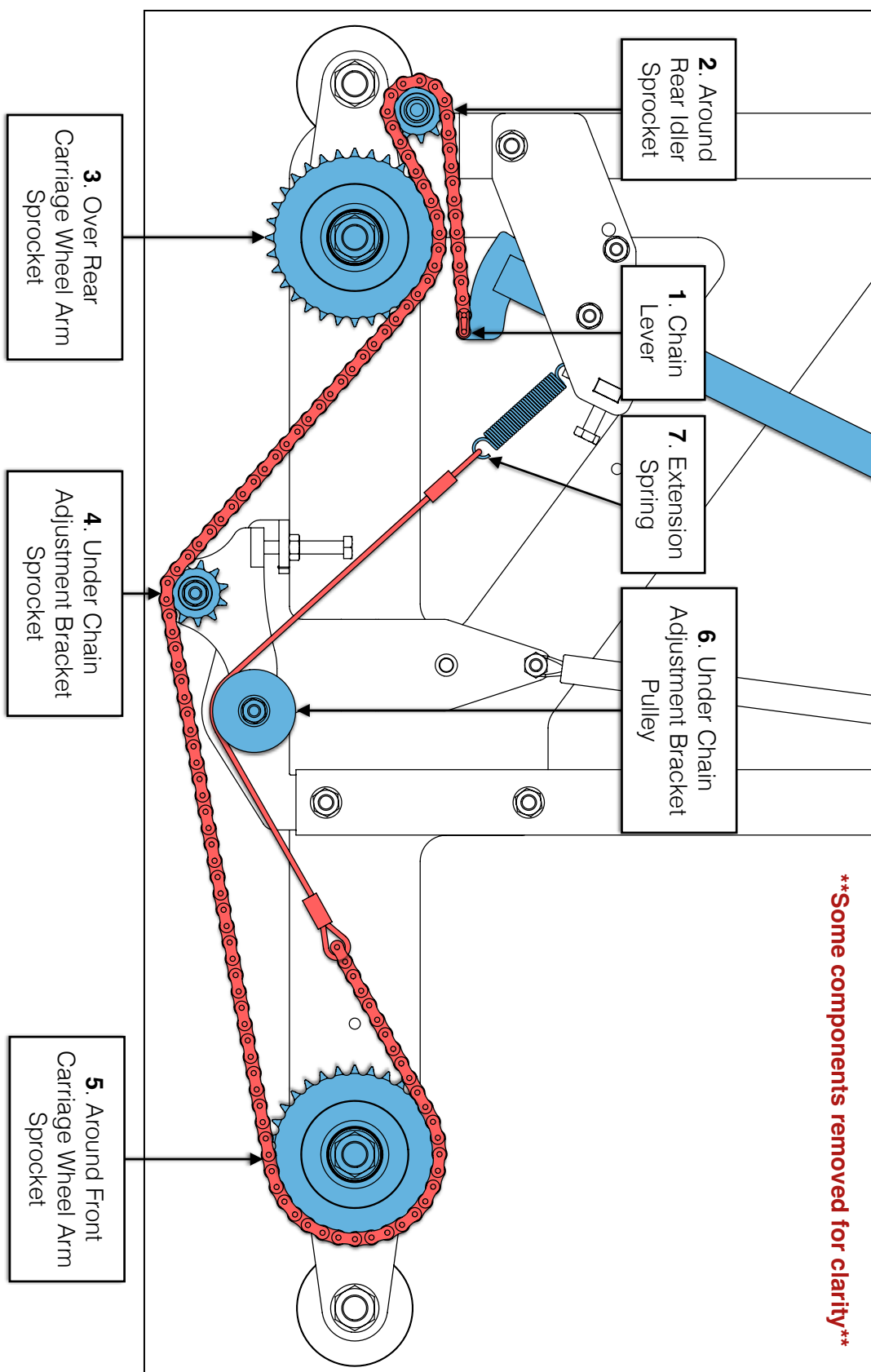


Now route the cable portion of the cable chain under the chain adjustment bracket pulley and hook the open loop end on the extension spring.



As long as the extension spring is under even a small amount of tension, the cable chain routing is acceptable.

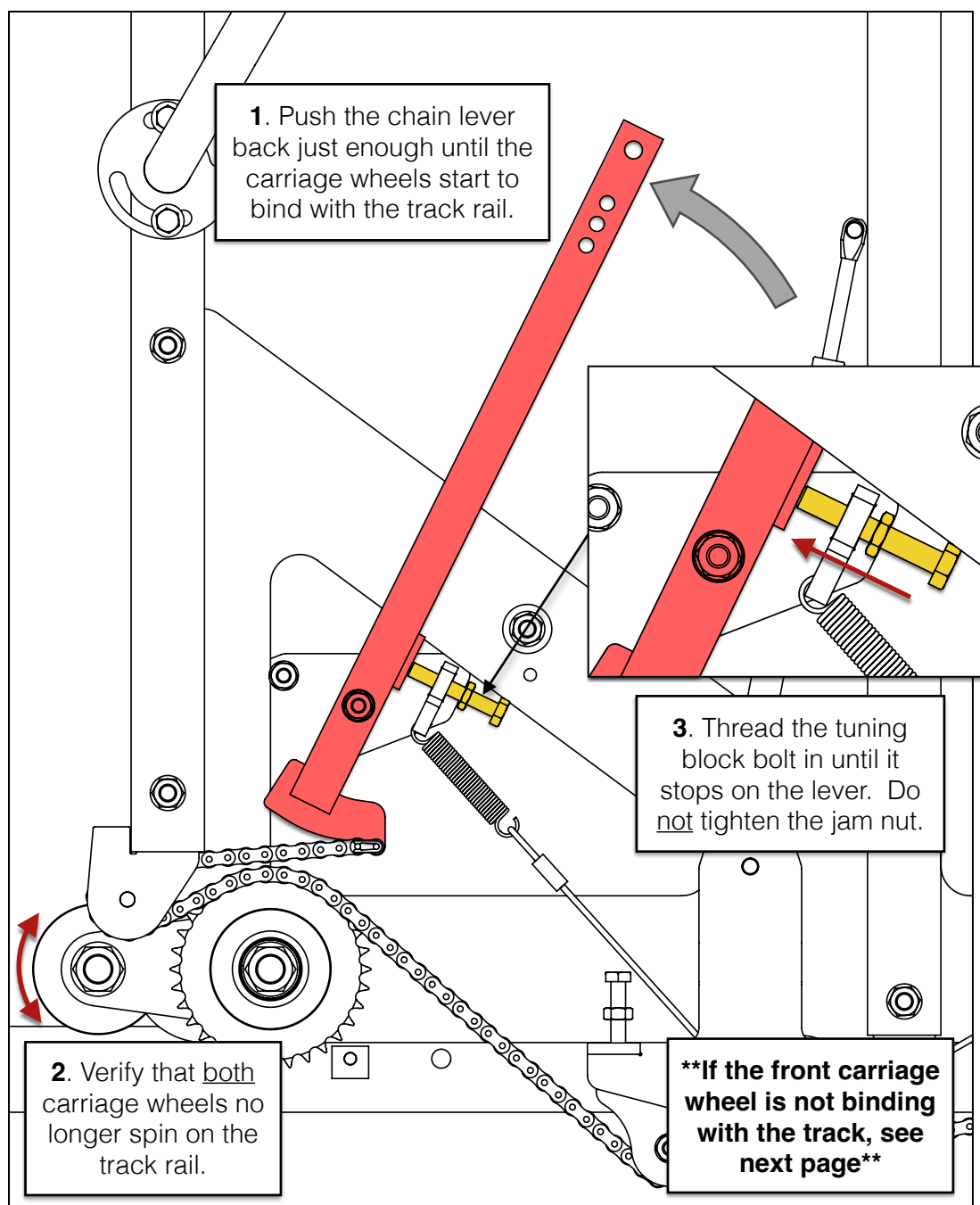
Cable Chain Routing Overview



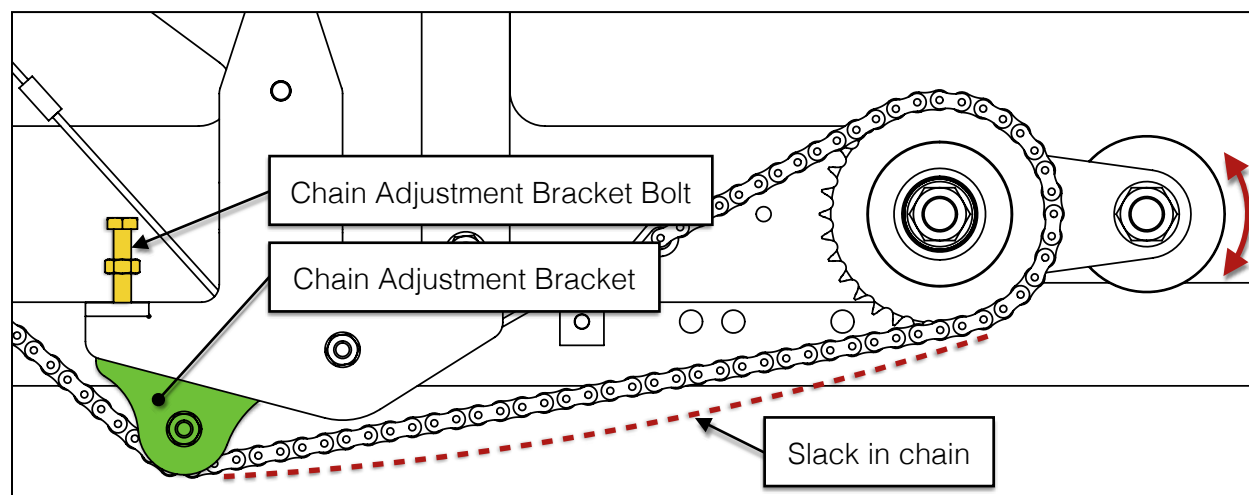
CARRIAGE WHEEL ADJUSTMENT

Push the chain lever back with just enough force so that the carriage wheels bind with the track rail. The carriage wheels should not be able to spin.

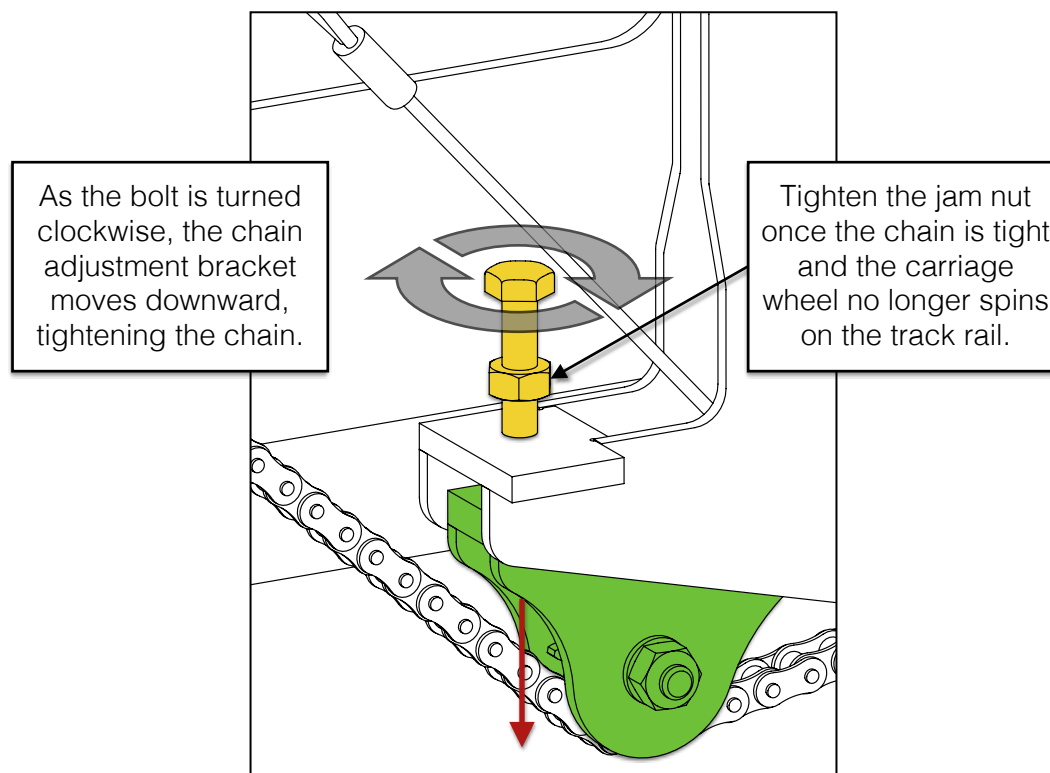
Thread the tuning block bolt in until it stops at the chain lever. Do not tighten the jam nut as further adjustment to this bolt will be necessary.



If the front carriage wheel is not binding with the track rail, there is likely slack in the chain between the chain adjustment bracket sprocket and the front carriage wheel arm sprocket.

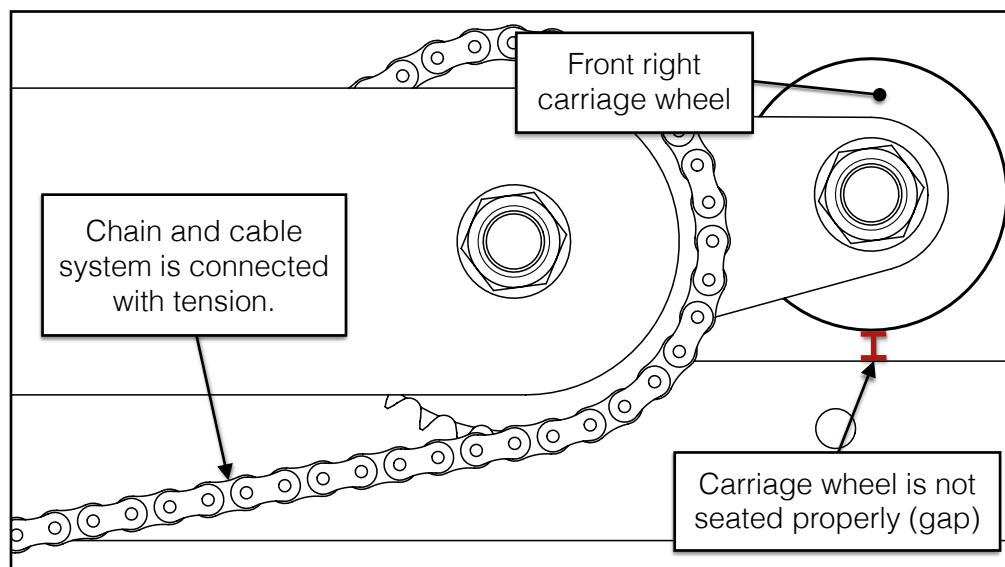


Tighten the chain adjustment bracket bolt by turning it clockwise until the slack is taken up and the carriage wheel binds with the track rail.

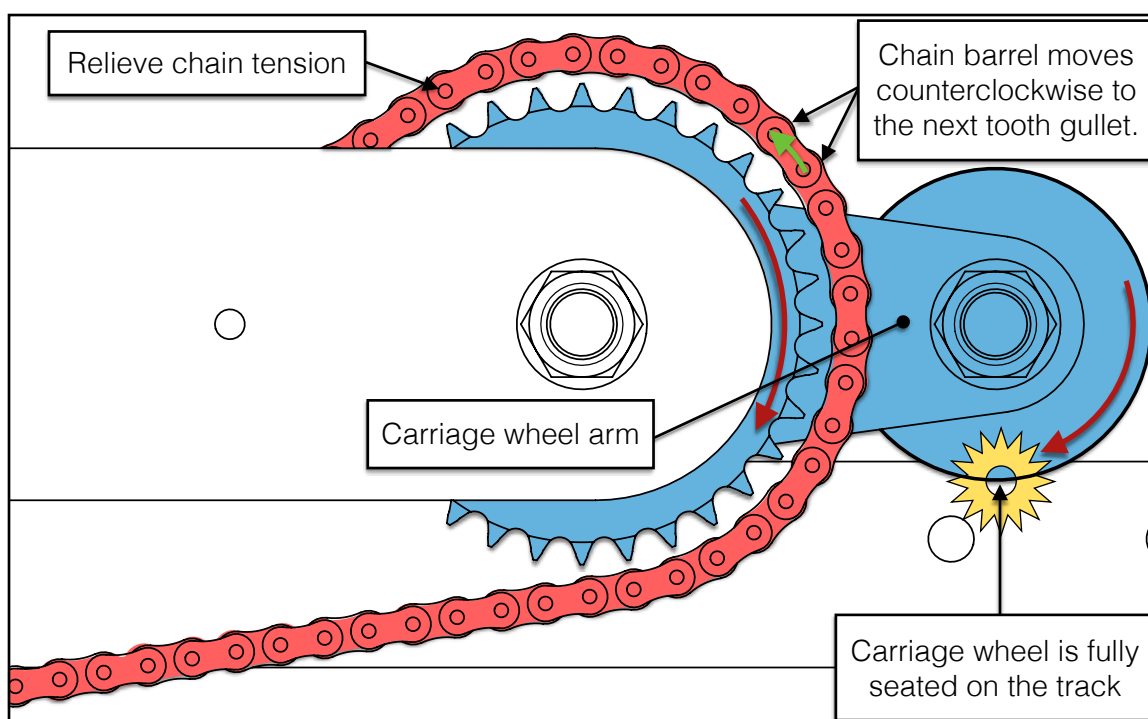


CARRIAGE WHEEL ALIGNMENT

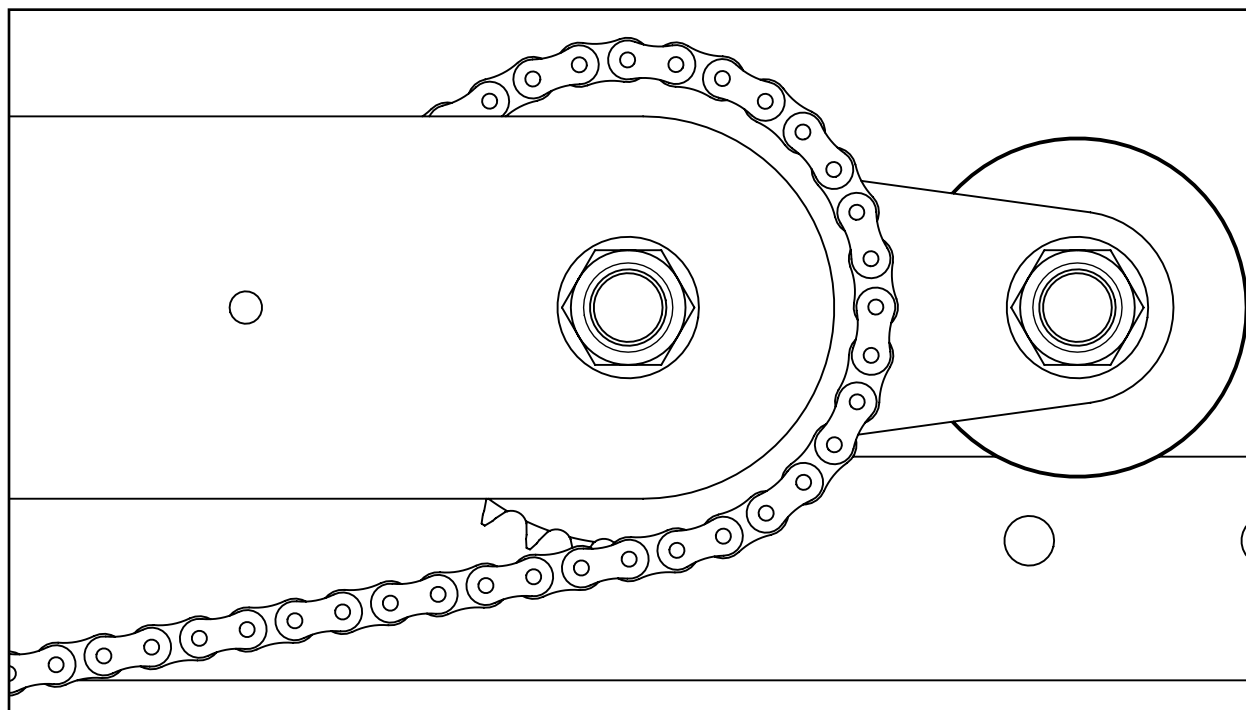
If either the front-right carriage wheel and/or the rear-right carriage wheel are still not seated properly on the track rail after ***CARRIAGE WHEEL ADJUSTMENT*** (page 34), then the chain needs to skip a link on the front-right carriage wheel arm.



Loosen and undo any adjustment made to the chain adjustment bracket in the previous step. This step requires the assistance of one or more people: lift the *right side* of the sawhead approximately 2 inches up off the setup blocks. Skip one chain link on the front-right carriage wheel arm, moving the carriage wheel arm downward.



Reseat the chain on the carriage wheel arm sprocket.

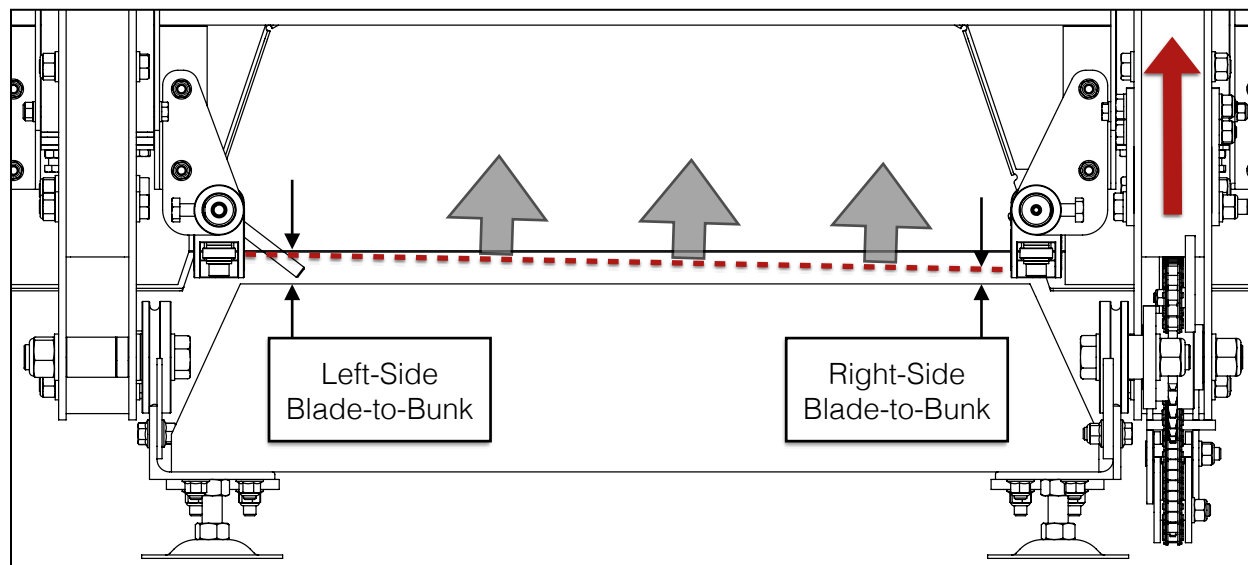


If the **CARRIAGE WHEEL ALIGNMENT** section on page 42 was necessary, return to the **CARRIAGE WHEEL ADJUSTMENT** section on page 40 before proceeding with install.

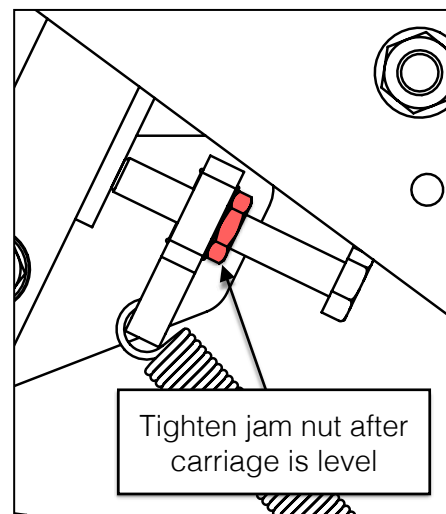
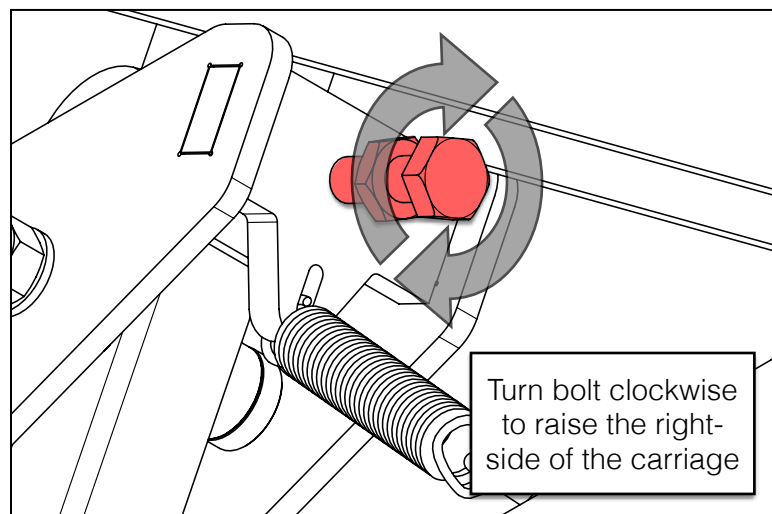
LEVELLING THE CARRIAGE

Once the carriage wheels are seated firmly on the track rail and the chain is tight with no slack, the sawhead can be levelled.

Roll the sawhead forward until the blade is over one of the track bunks. Measure the distance from the blade-to-bunk on the left-side and then measure the distance on the right-side. The difference between the two measurements is how far up the right-side of the sawmill needs to be raised.

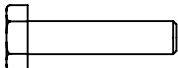




Turn the tuning block bolt clockwise to raise the sawhead until it is level. Once level, tighten the jam nut.

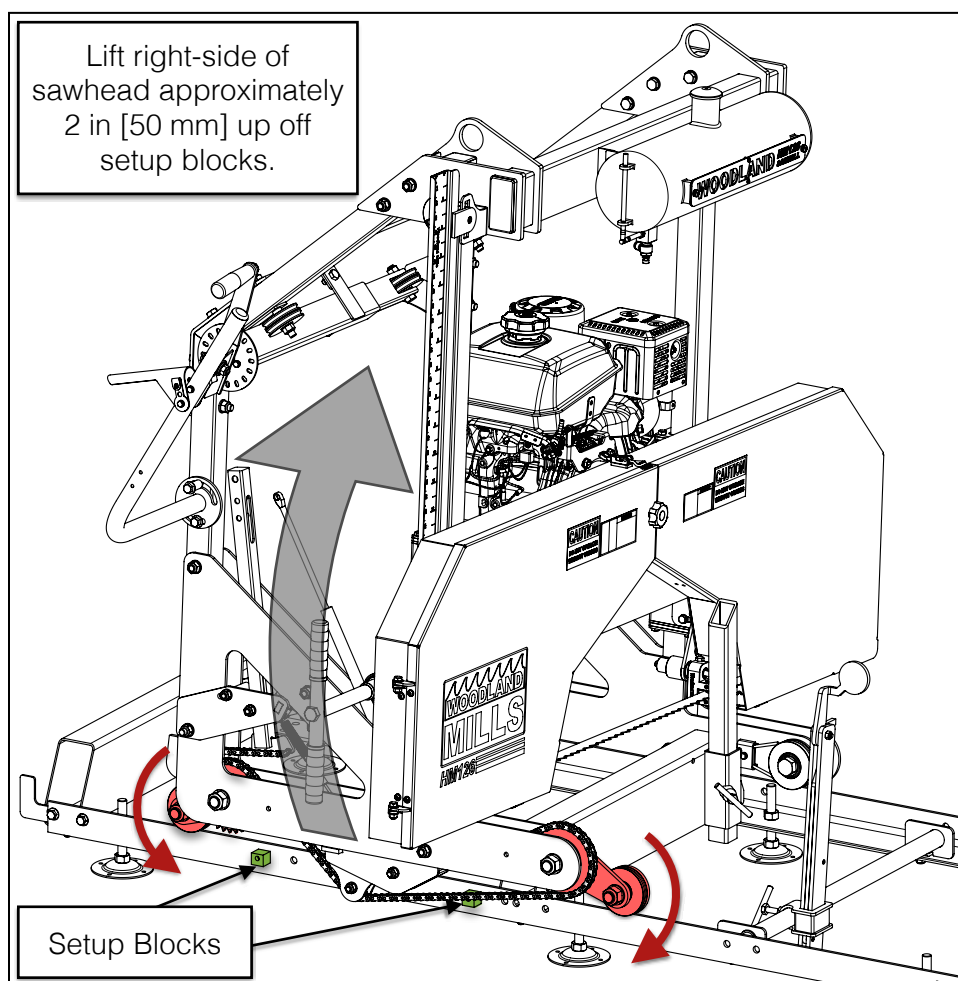


9. GAS SPRING

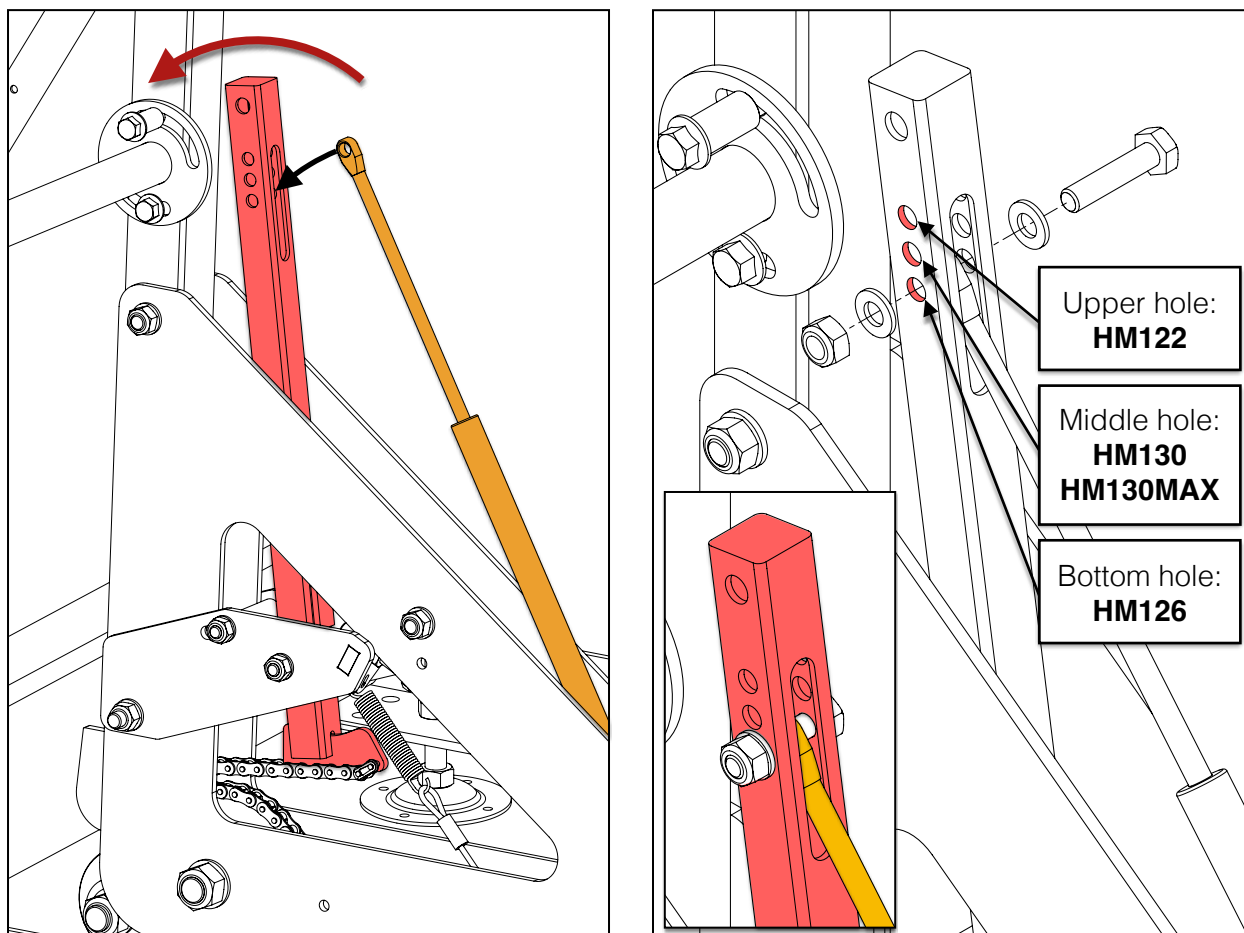
Using the hardware listed below, connect the gas spring to the chain lever.

1x	M10 X 45 mm Hex Bolt		2x	M10 Flat Washer	
1x	M10 Lock Nut				

This step requires the assistance of one or more people. Lift the right side of the sawhead approximately 2 in [50 mm] off the setup blocks. This will cause both of the carriage wheel arms to rotate downward.



Push the lever all the way rearward and rotate the gas spring until the eyelet fits through the slot in the front of the lever.



****Assemble the gas spring to the chain lever using the upper lever hole for HM122, the middle hole for HM130 & HM130MAX, and the bottom lever hole for HM126.****

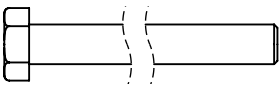
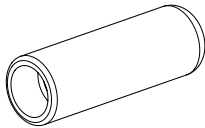
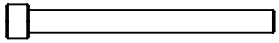
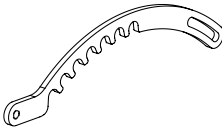



With the chain lever angled back, assemble the gas spring to the chain lever using one (1) M10 X 45 mm hex bolt, two (2) M10 flat washers, and one (1) M10 lock nut.

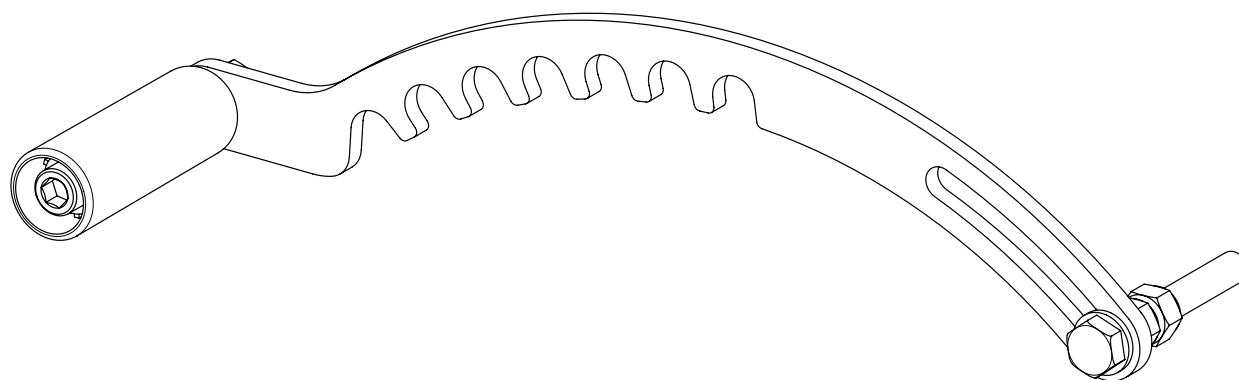
Once the nut is loosely threaded on the bolt, lower the sawhead carriage back down and the gas spring will compress under the weight of the sawhead. Fully tighten the hardware.



10. INDEXING HANDLE

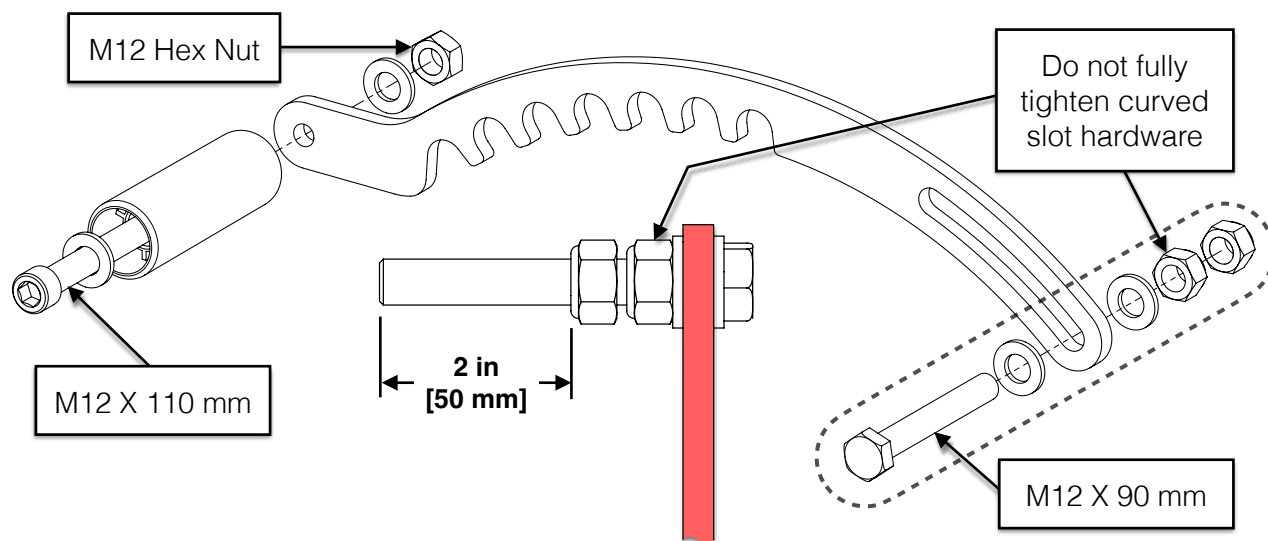
Using the hardware listed below, assemble the indexing handle and then connect it to the chain lever.

1x	M12 X 90 mm Hex Bolt		1x	Handle Grip	
1x	M12 X 110 mm Socket Head Cap Screw		1x	Indexing Handle	
3x	M12 Lock Nut				
1x	M12 Hex Nut				
4x	M12 Flat Washer				

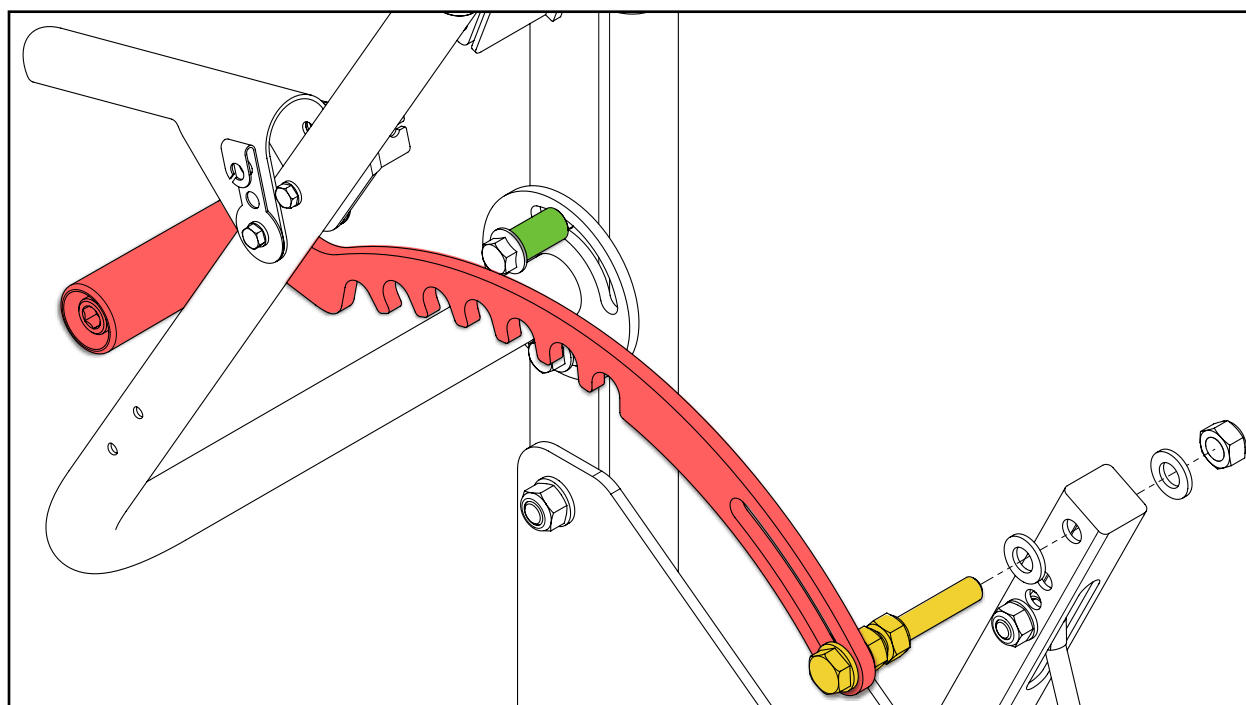


Assemble the plastic revolving handle to the end of the indexing handle using one (1) M12 lock nut. Then assemble the M12 X 90 mm hex bolt, two (2) flat washers, and double M12 lock nut stack to the curved slot. Do not fully tighten the curved slot hardware until instructed to do so.

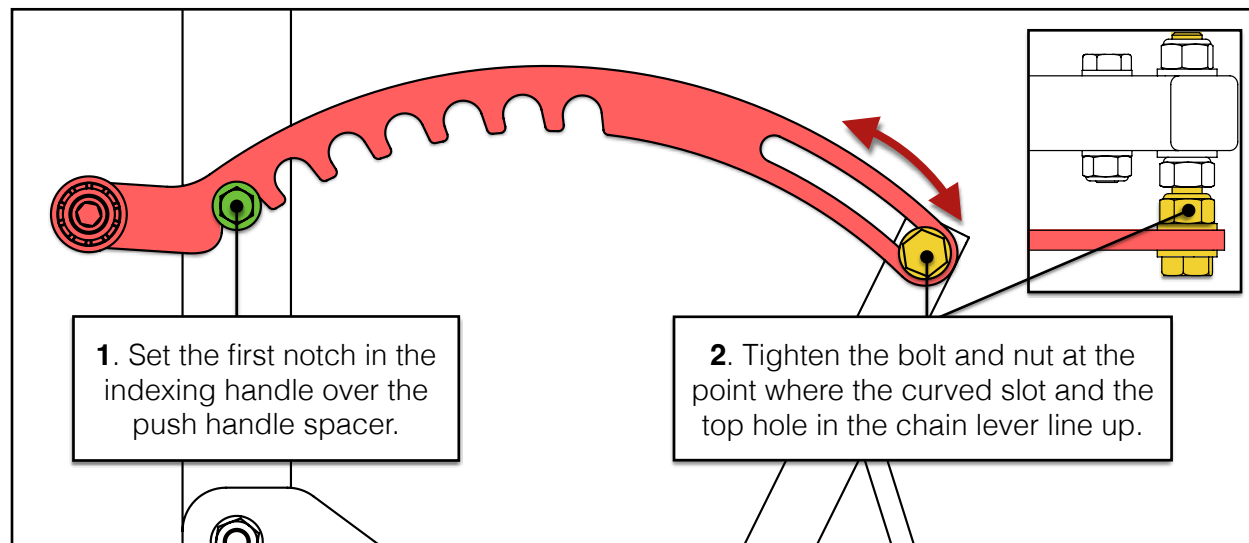
Leave approximately 2 in [50 mm] from the end of the bolt to the first lock nut at the curved slot.



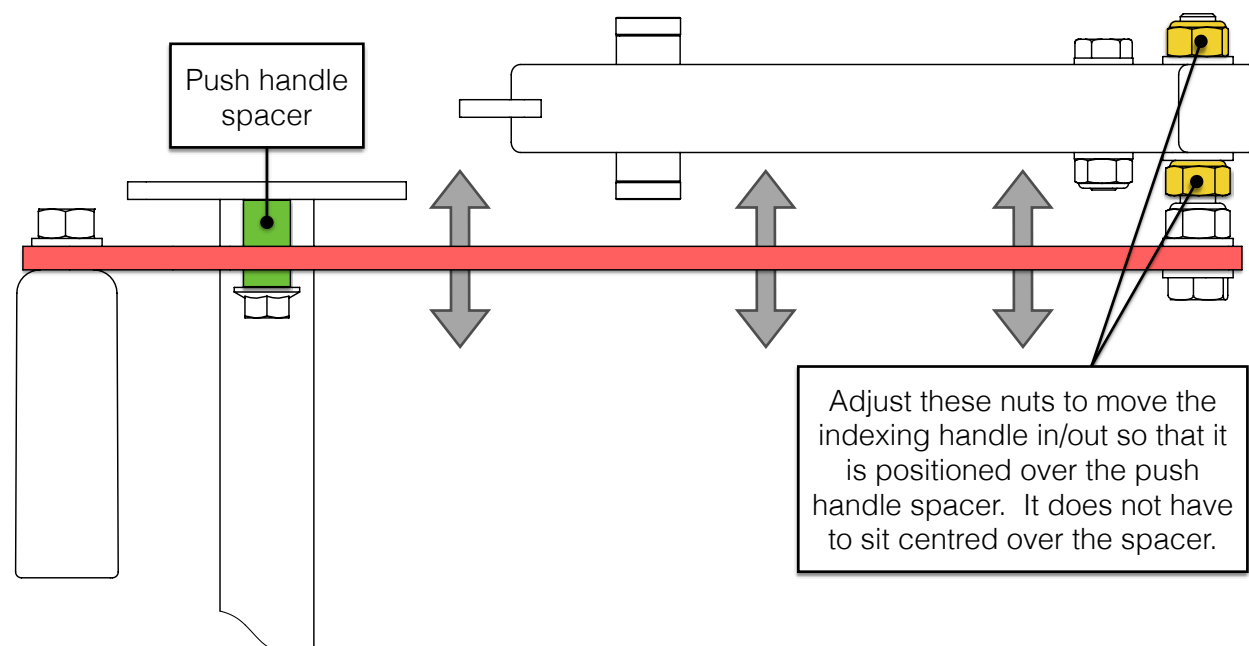
Assemble the indexing handle sub-assembly to the top hole of the chain lever using two (2) M12 flat washers and one (1) M12 lock nut. Do not fully tighten this hardware.



Set the first notch in the indexing handle over the push handle spacer. Tighten the curved slot bolt and nut once seated. Do not move the chain lever when tightening the hardware.

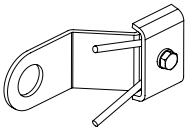


Adjust the middle and end nuts on the indexing handle to better position the handle over the push handle spacer. Fully tighten the hardware once positioned correctly.



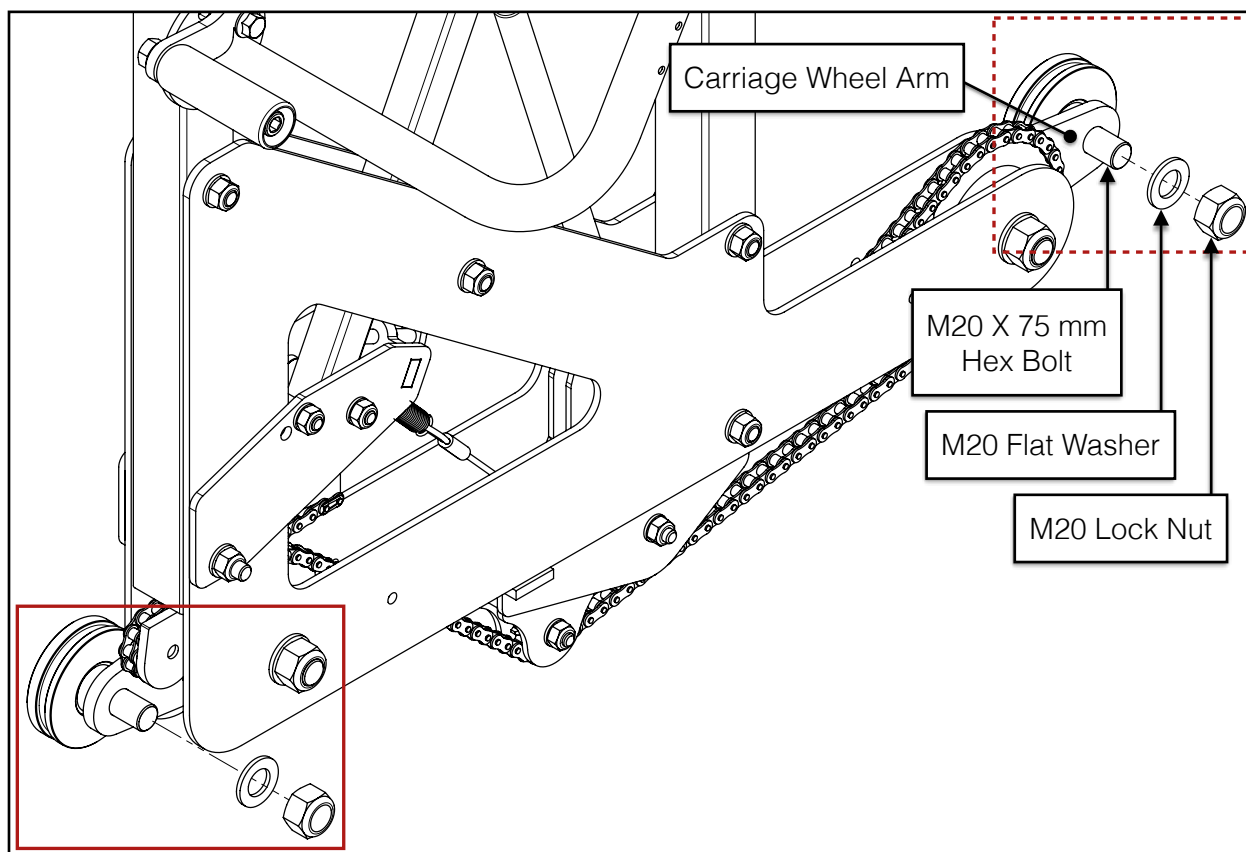
11. CARRIAGE WHEEL SWEEPERS

Assemble each sweeper bracket prior to installing them to the lap siding attachment.

2x	Wheel Sweeper Assembly	
----	------------------------------	---

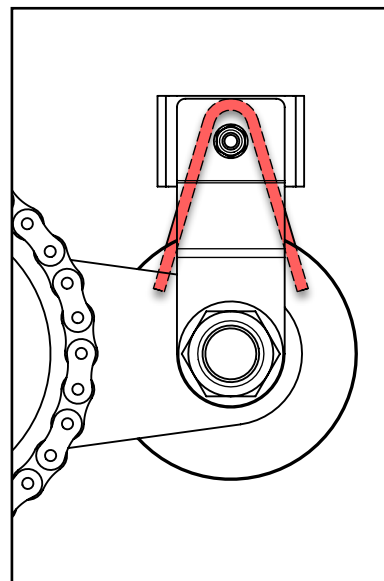
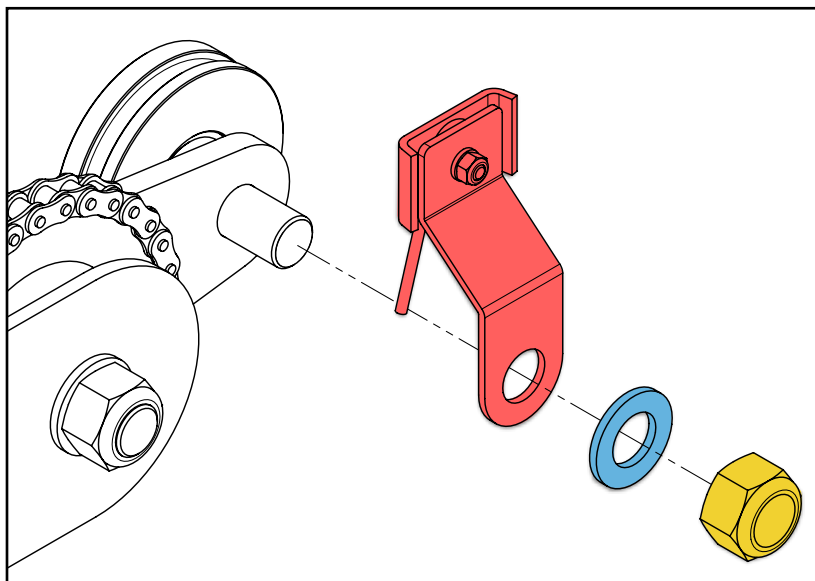
Remove one of the M20 lock nuts and M20 flat washers securing the carriage wheel to the carriage wheel arm.

****Note: Do not remove both M20 lock nuts at the same time. Install one wheel sweeper assembly to completion first before installing the other.****

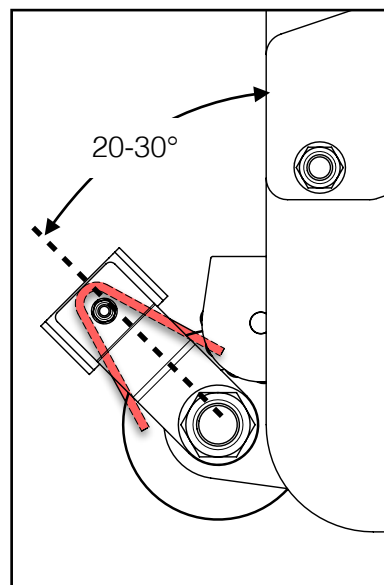
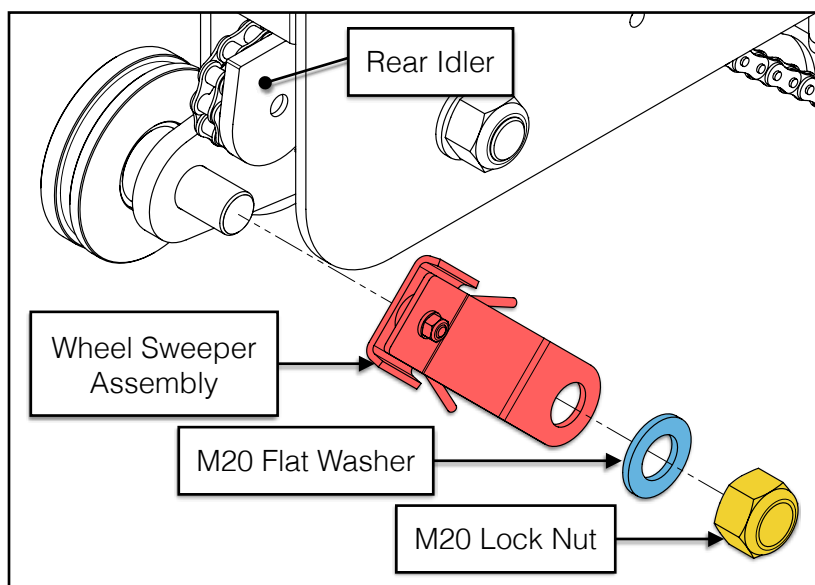


Install the wheel sweeper assemblies onto the M20 X 75 mm hex bolts using the M20 flat washers and M20 lock nuts that were removed in the previous step.

On the front carriage wheel, position the wheel sweeper assembly vertical (90°) in relation to the track. Fully tighten the hardware.



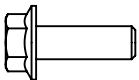
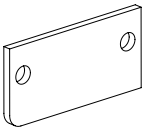

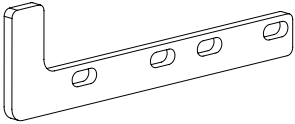
On the rear carriage wheel, turn the wheel sweeper assembly so that it is angled approximately 20-30° from the rear carriage post. Ensure it is oriented as shown to avoid the rear idler. Fully tighten the hardware.



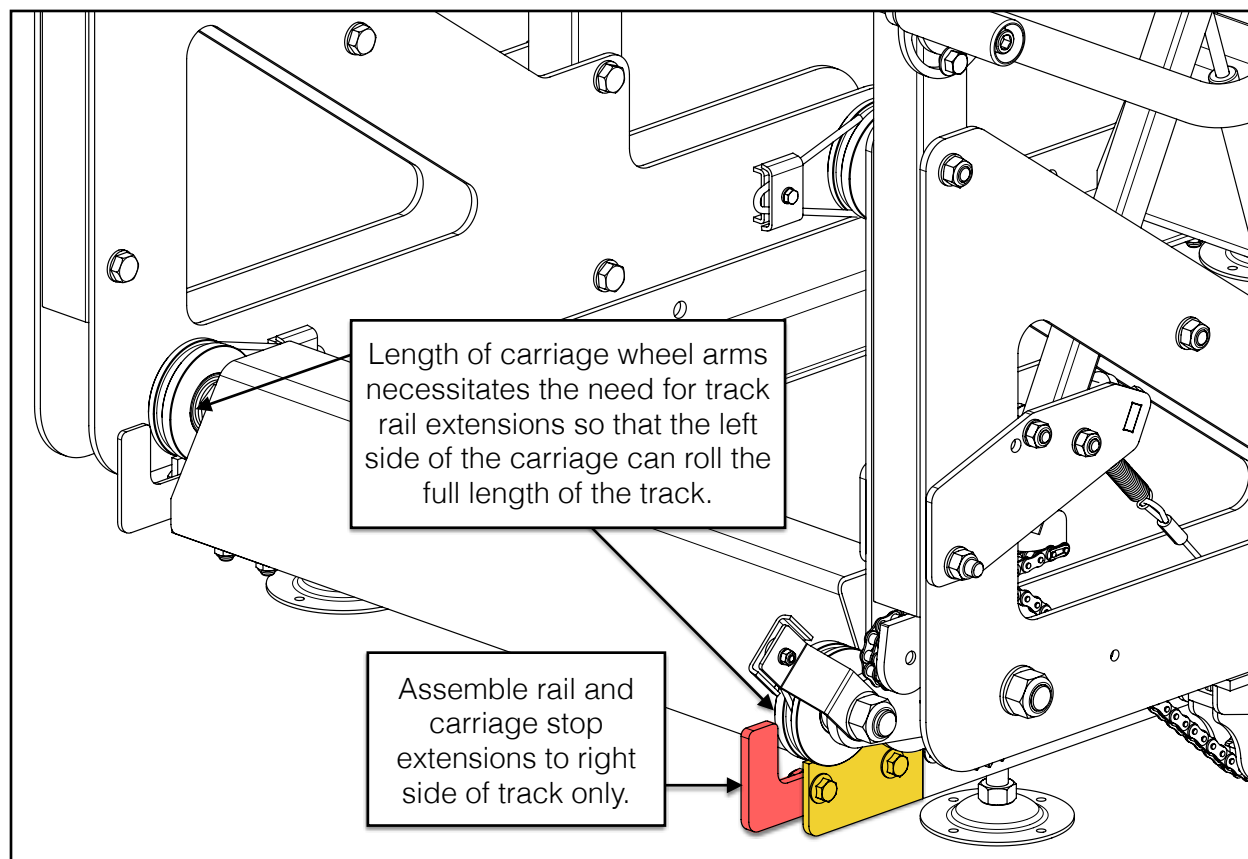


12. TRACK RAIL EXTENSIONS

Using the hardware listed below, assemble a track rail extension and extended carriage stop to each end of the right-side sawmill track rails.

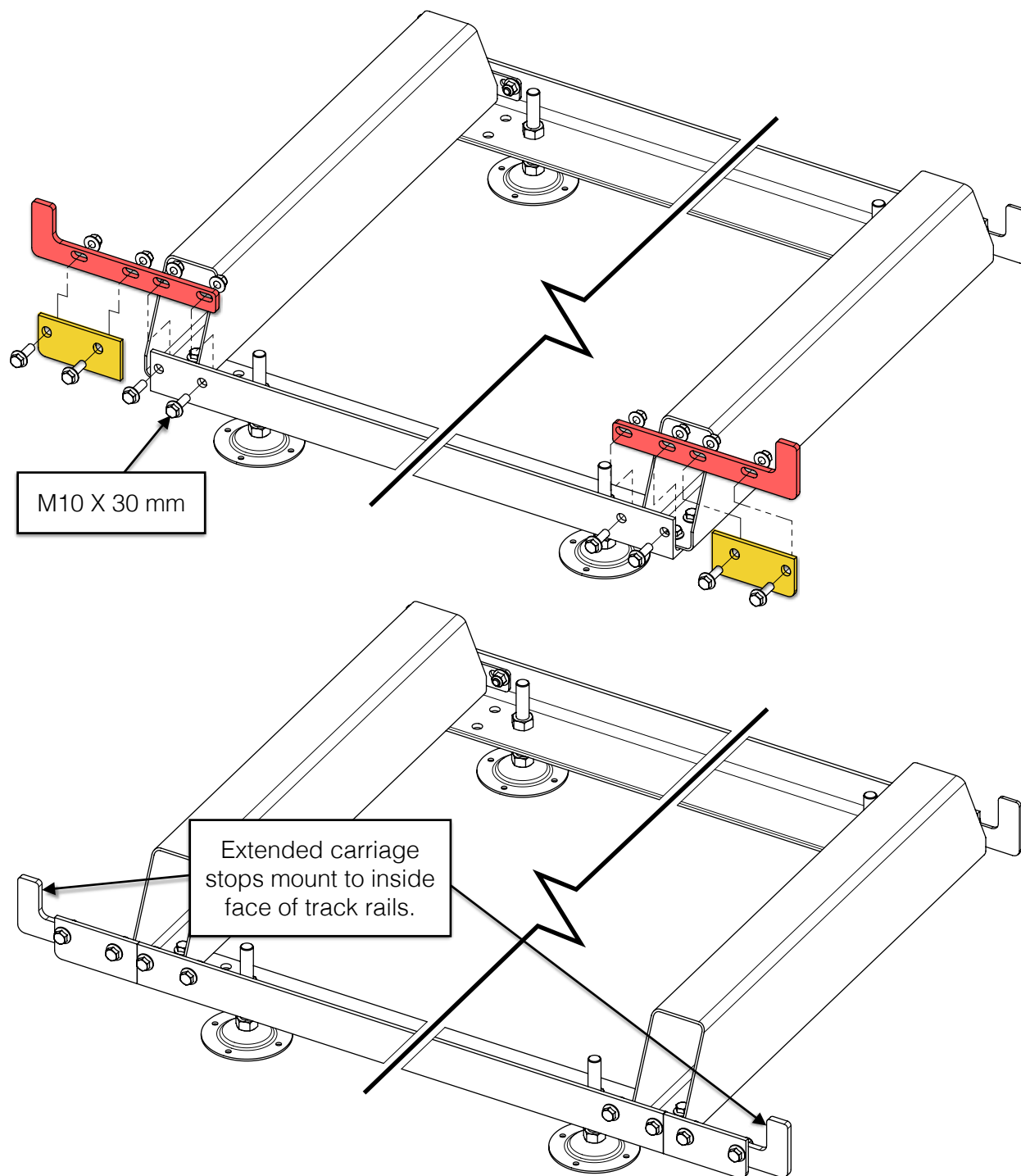
8x	M10 X 30 mm Flanged Hex Bolt		2x	Rail Extension	
8x	M10 Flanged Lock Nut		2x	Extended Carriage Stop	

Because of the increased length on the right-side of the sawmill carriage due to the addition of the carriage wheel arms, track rail extensions are added in order to maintain the maximum log cut length. This applies whether or not the track is standard length (10 ft) or has an extension (16 ft).



First, remove the existing carriage stops from both ends of the right-side track rails.

Next, assemble a rail extension and extended carriage stop to each end of the right-side track rails using four (4) M10 X 30 mm flanged hex bolts and four (4) M10 flanged lock nuts per end.

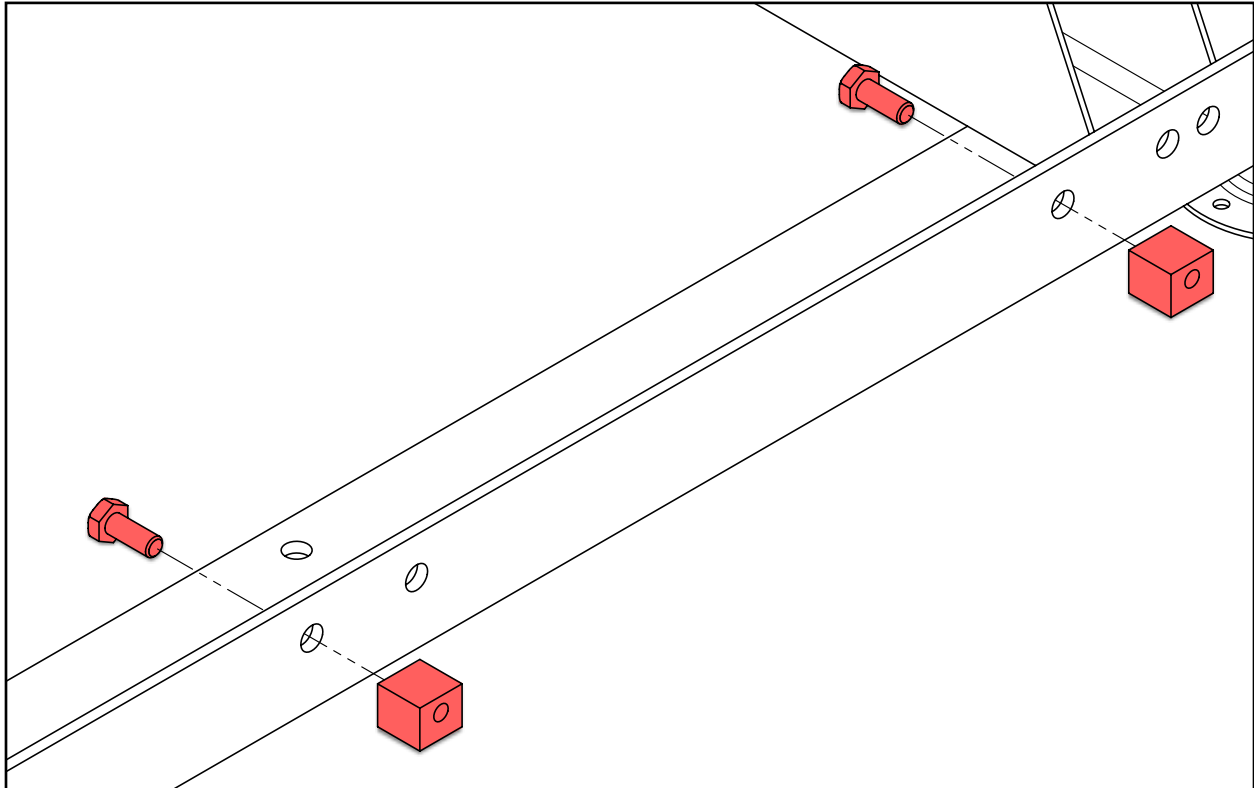




13. SETUP BLOCK REMOVAL

With the lap siding attachment assembly complete, remove the two (2) setup blocks from the track rail. Be sure to store these components and associated hardware in case the lap siding attachment is removed in the future.

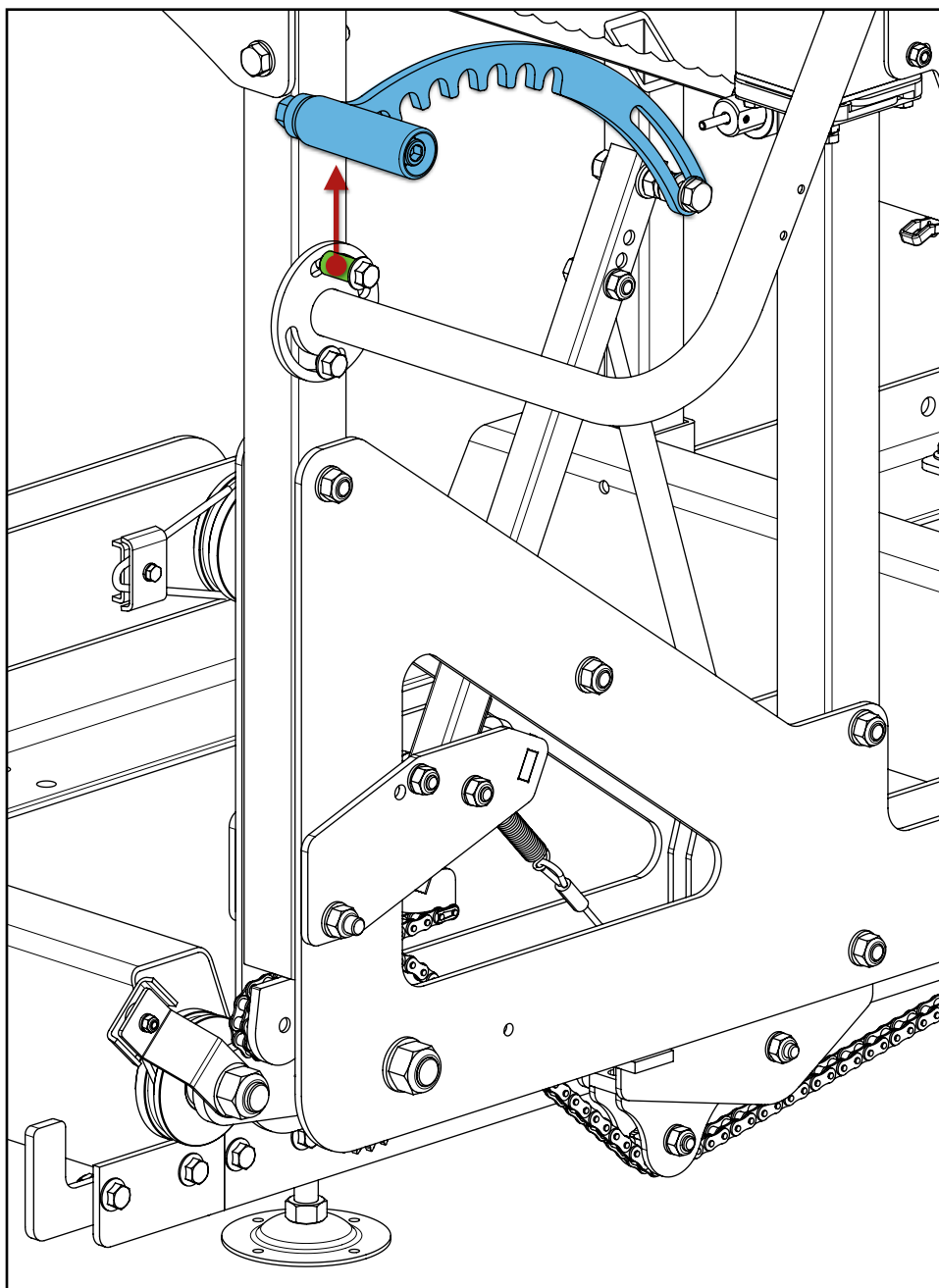
Roll the sawhead carriage away from the setup blocks and remove the two (2) M10 X 25 mm hex bolts.



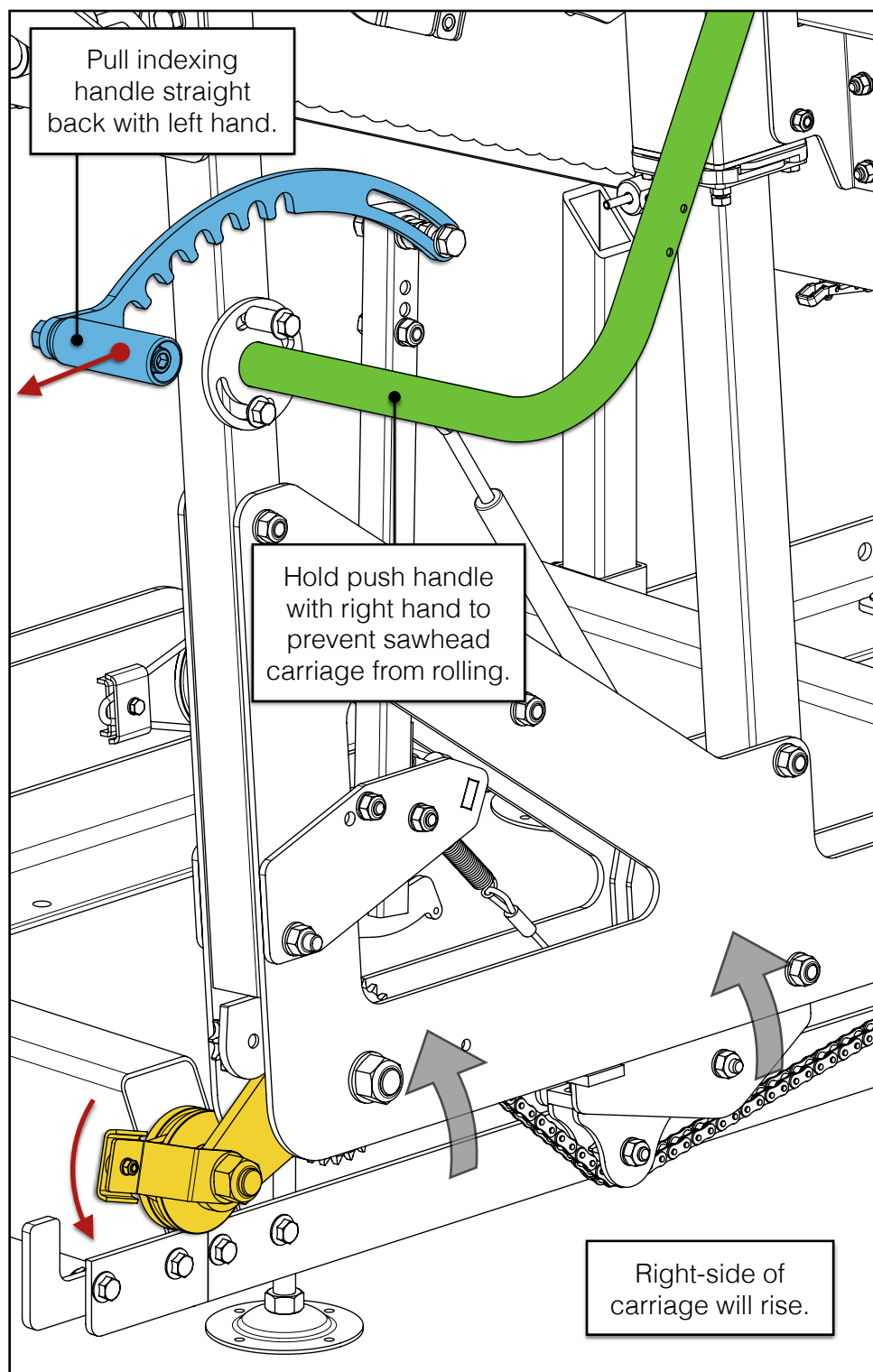
OPERATION

ANGLING THE SAWHEAD

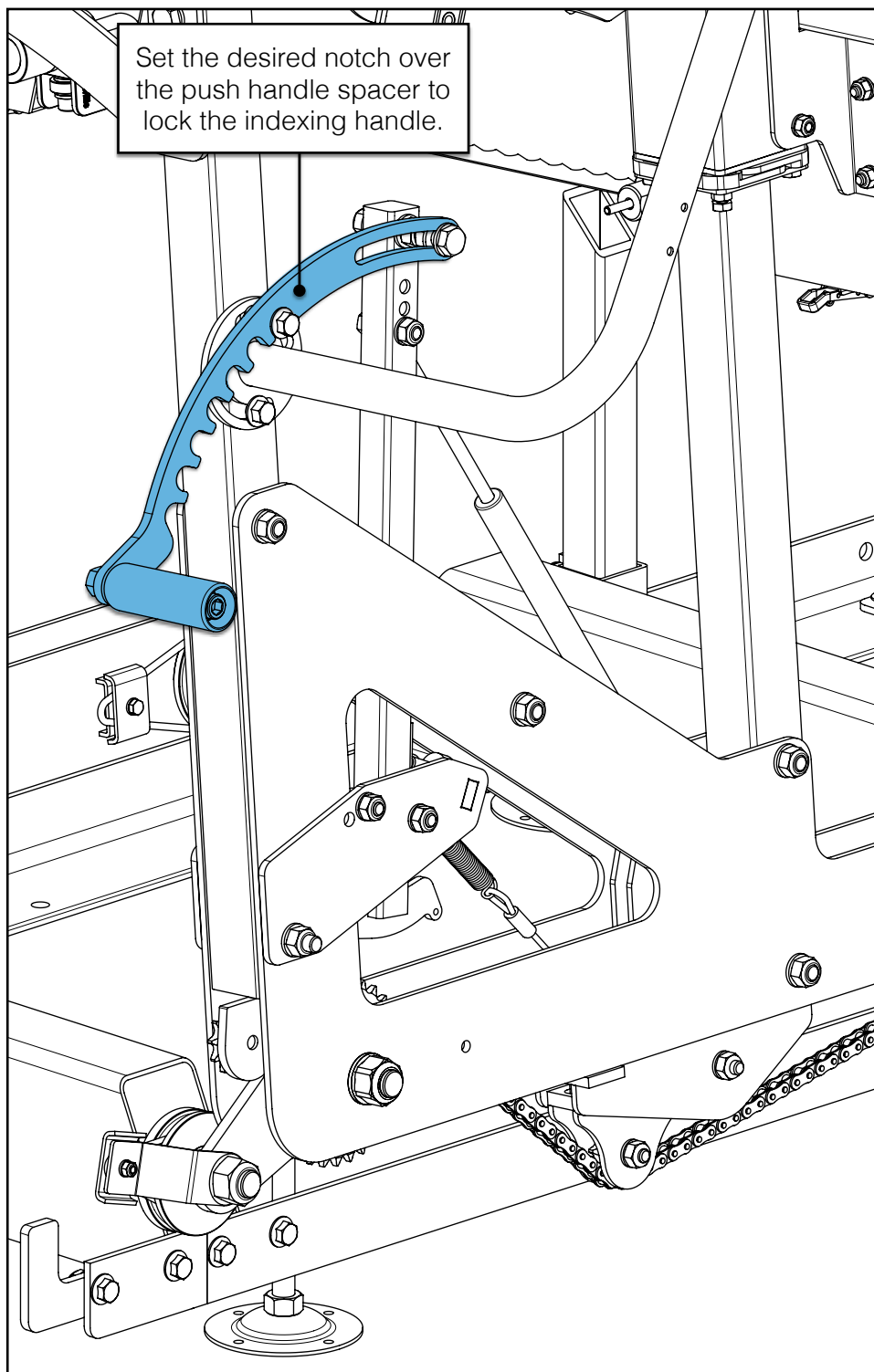
To angle the sawhead, first lift the indexing handle up off the push handle spacer.



Then, while holding the push handle to prevent the carriage from rolling, pull the indexing handle towards the rear. The right-side of the carriage will rise as the lever is pulled.



Finally, set the desired notch in the indexing handle over the push handle spacer to lock the sawhead in at that angle.

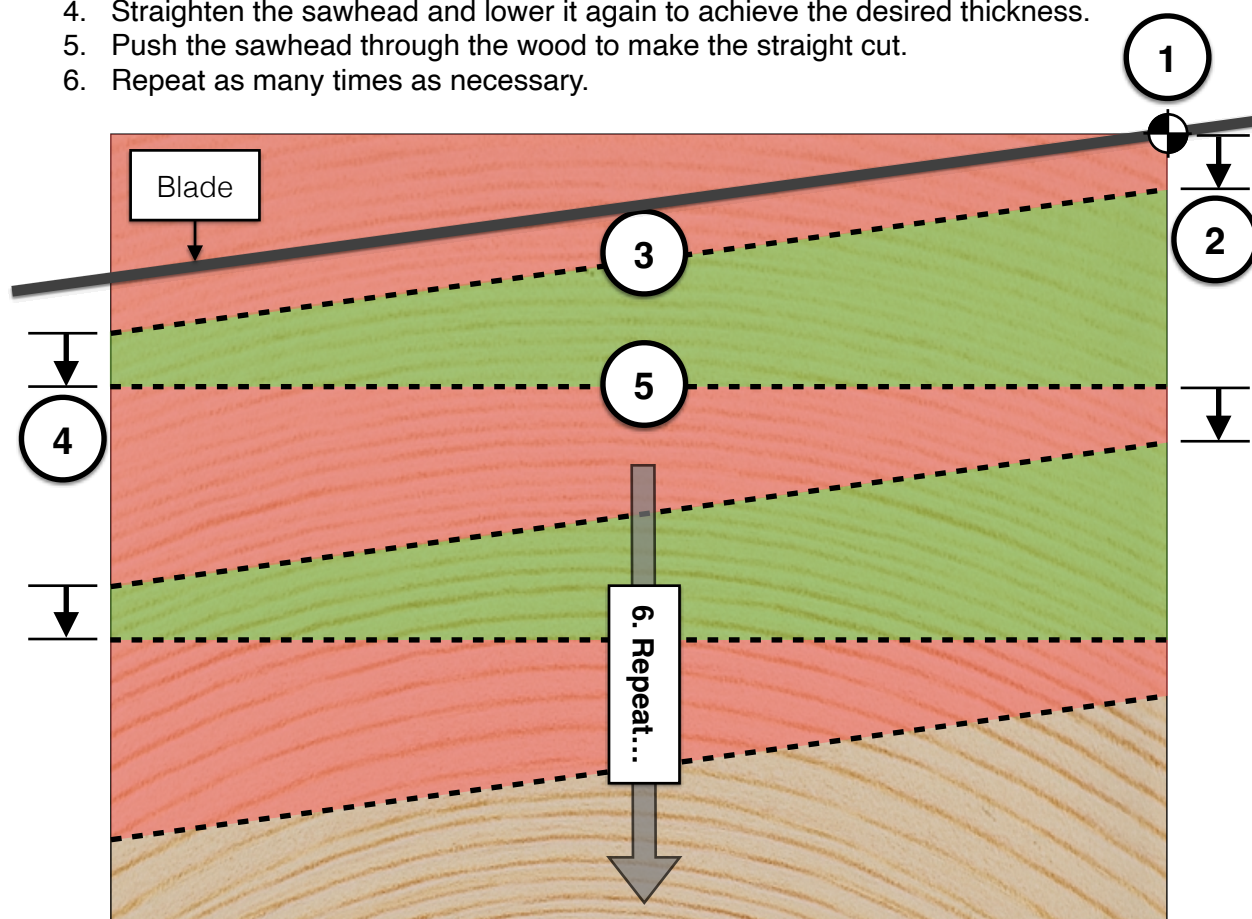


LAP SIDING CUT METHOD

Before lap siding boards can be cut, first mill a log to an appropriate square cant size to achieve the desired board width.

Then follow these steps to cut the canted lumber to minimize waste:

1. Angle the sawhead by setting the indexing handle to the appropriate notch and align the blade with top-right corner of the canted lumber. Remember which notch was used so as to maintain uniformity on successive angled cuts.
2. Using the carriage crank handle, lower the sawhead to the desired thickness.
3. Push the sawhead through the wood to make the angled cut.
4. Straighten the sawhead and lower it again to achieve the desired thickness.
5. Push the sawhead through the wood to make the straight cut.
6. Repeat as many times as necessary.

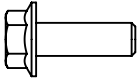

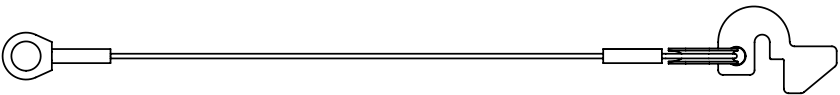


Note: the notches in the indexing handle do not represent fixed angles. The sawhead angle will vary depending on sawmill model.

TRAILER LOCK-DOWN

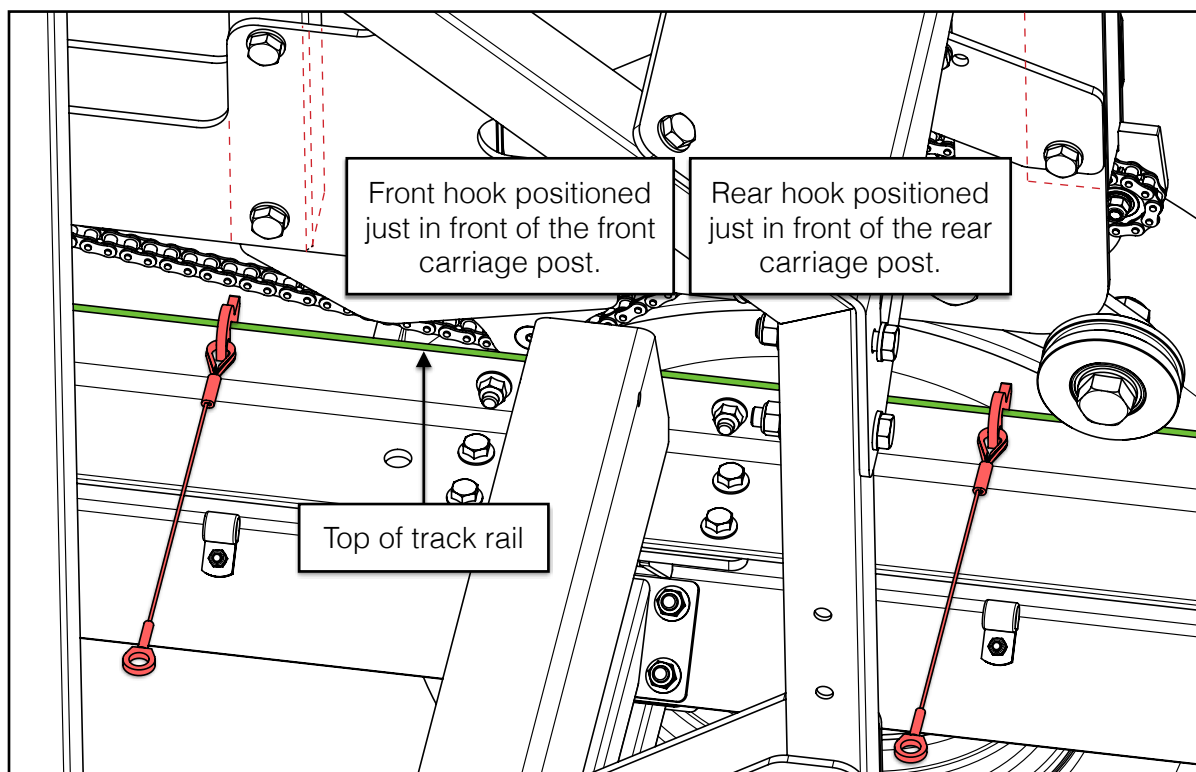
****This section applies to owners with sawmill trailers only.****

The lap siding kit comes with two (2) travel hooks with wire rope lanyards that are used to lock the sawhead carriage to the track. HM126 & HM130(MAX) kits also include hardware for mounting the hooks to Woodlander sawmill trailers with extensions (XL versions only).

2x	M10 X 25 mm Flanged Hex Bolt Woodlander XL(MAX)		2x	M10 Flanged Lock Nut Woodlander XL(MAX)	
2x	Travel Hook with Lanyard				

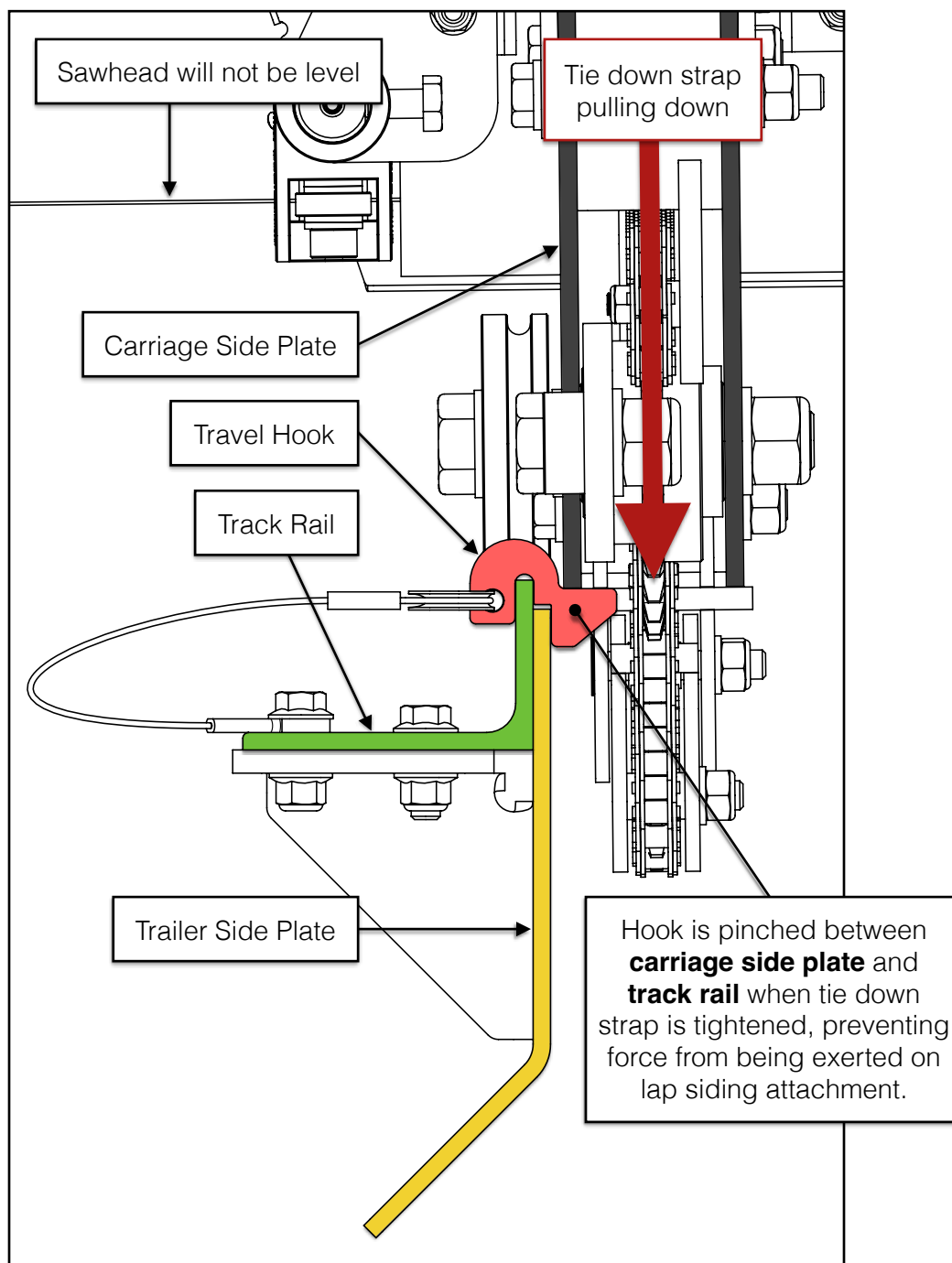
Roll the sawhead carriage forward to its lock-down position. See section, **HEAD LOCK-DOWN PLATES**, in the sawmill trailer manuals for more information.

Use the lap siding indexing handle to raise the right-side of the sawhead carriage to its maximum height. Place the travel hooks over top of the track rail, positioning them so they are located just in front of the carriage posts. Lower the carriage back down onto the hooks.



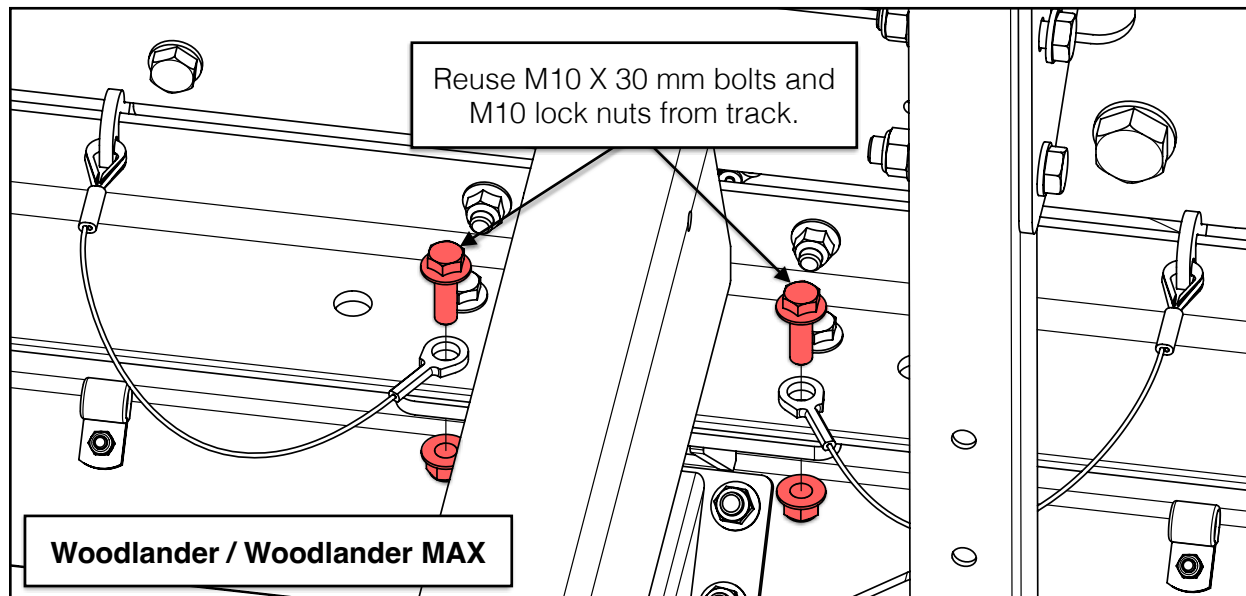
The hooks act as a vertical carriage stop, preventing the lap siding attachment from sustaining damage when the tie-down strap is tightened while readying the sawmill trailer for transport.

Note that the carriage will not sit level when locked-down for transport. This is normal.

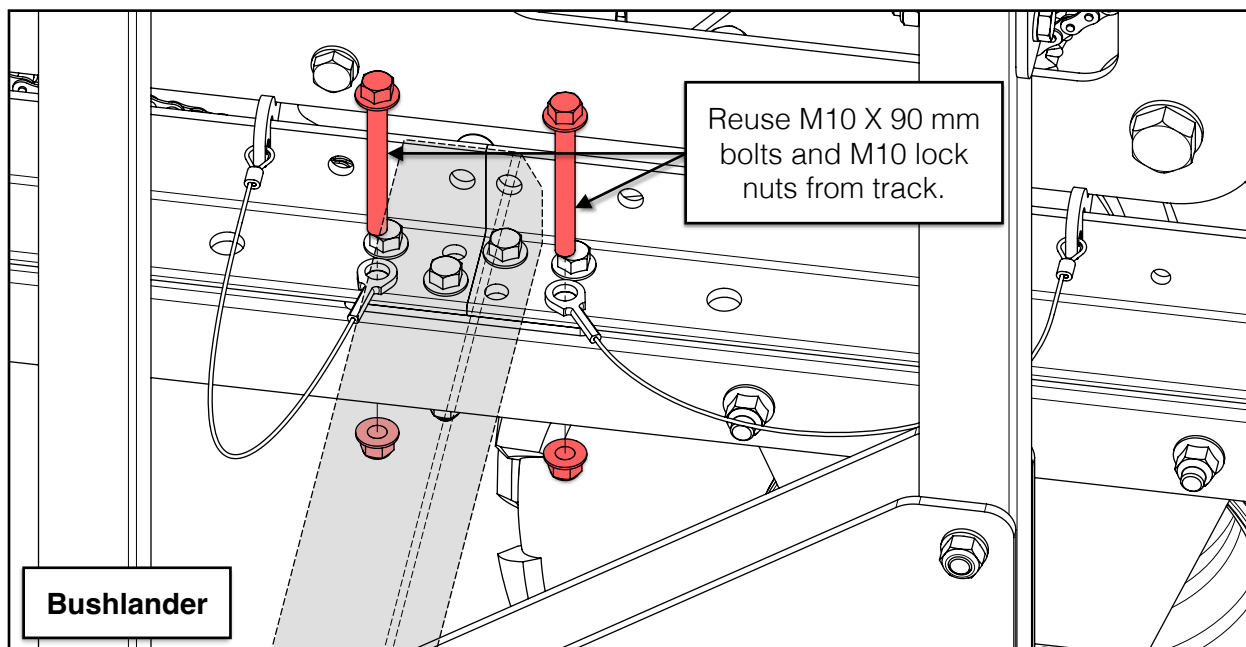


****Some components removed for clarity****

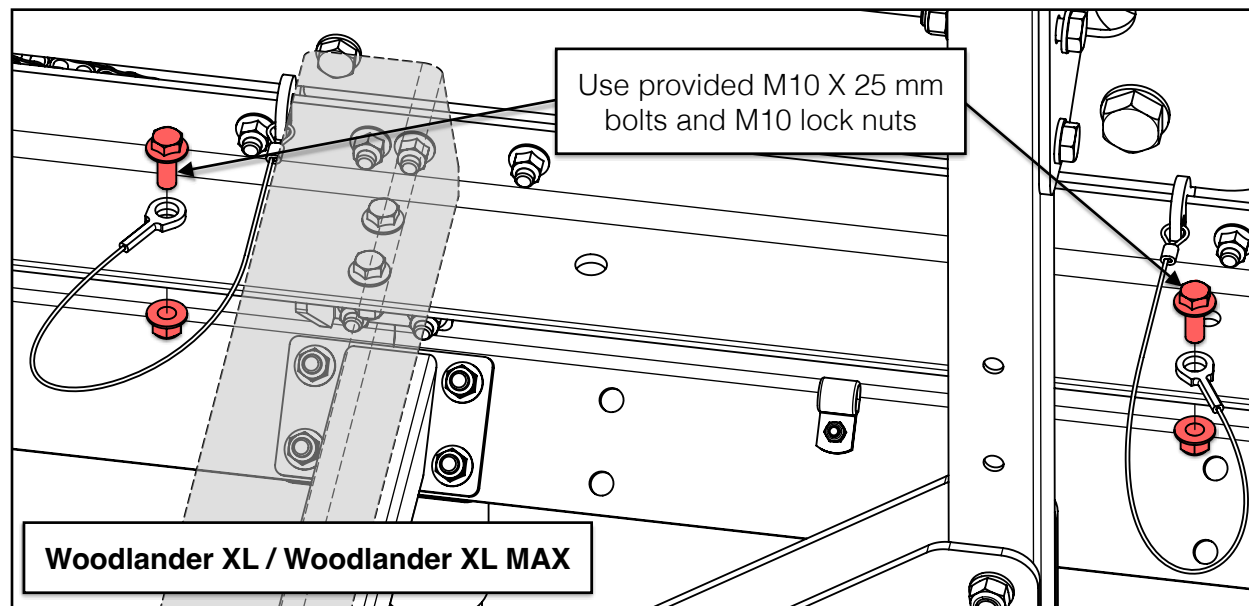
On *Woodlander* and *Woodlander MAX* sawmill trailers *without* extensions, temporarily remove two (2) of the M10 X 30 mm flanged hex bolts from the track reinforcement plate and then reassemble them through the lanyard eyelets.



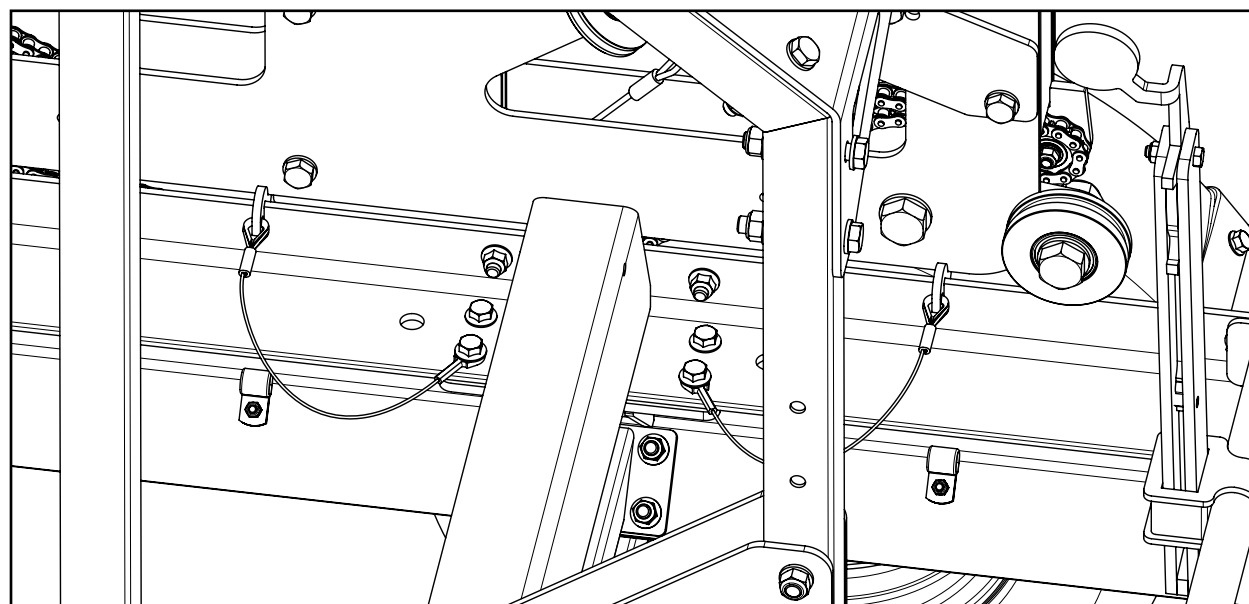
On *Bushlander* sawmill trailers *with* or *without* an extension, temporarily remove two (2) of the M10 X 90 mm flanged hex bolts from the track reinforcement plate and then reassemble them through the lanyard eyelets.



On *Woodlander XL* and *Woodlander XL MAX* sawmill trailers *with extensions*, use the two (2) M10 X 25 mm flanged hex bolts and M10 flanged lock nuts and assemble the travel hooks through the nearest open thru holes in the right side track rail.



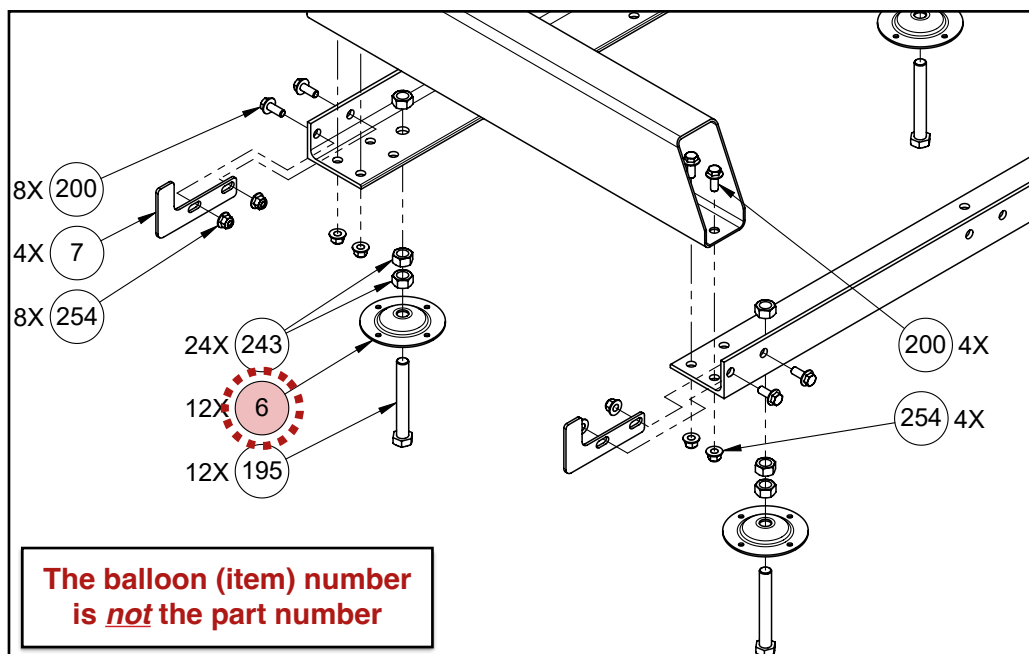
The lanyards prevent the travel hooks from getting lost when the sawmill trailer is not being transported. Be sure to remove the hooks from the top of the rail before milling lumber.



****Remember to continue to use the standard lock-down plates on the left side of the carriage when transporting the sawmill.****

REPLACEMENT PARTS ORDERING

When ordering replacement parts, first locate the balloon number(s) from the appropriate **exploded assembly view** as shown in the example below:



Next, turn to the **Parts List** section and locate the balloon number in the “**Item**” column:

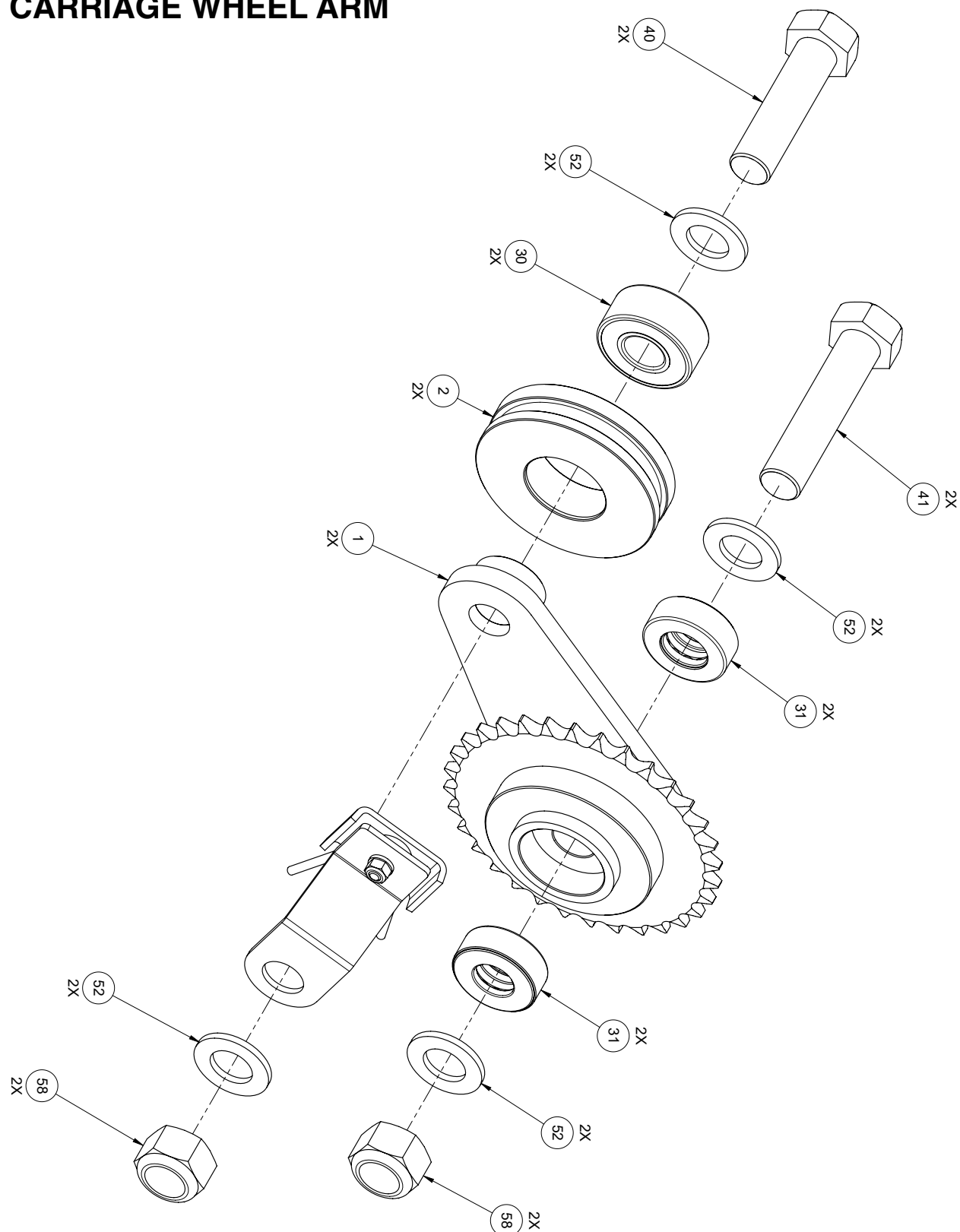
PARTS LIST

Item	Quantity		Part No.	Description
	14 hp	9.5 hp		
1	4	4	0001073	TRACK RAIL, 58.5 mm TALL
2	2	2	0001075	LOG BUNK, END
3	2	2	0001080	LOG BUNK, MID
4	1	1	0001084	LOG BUNK, CENTER
5	2	2	0001072	REINFORCEMENT PLATE, 90 X 200 mm
6	12	12	0001071	LEVELLING FOOT BASE
7	4	4	0001055	CARRIAGE STOP
8	1	1	0001062	LOG CLAMP SHAFT AND BRACKET WELDMENT

Record the part number (e.g. 0001071, HHB-MBM080FCJ, etc.) in the “**Part No.**” column.

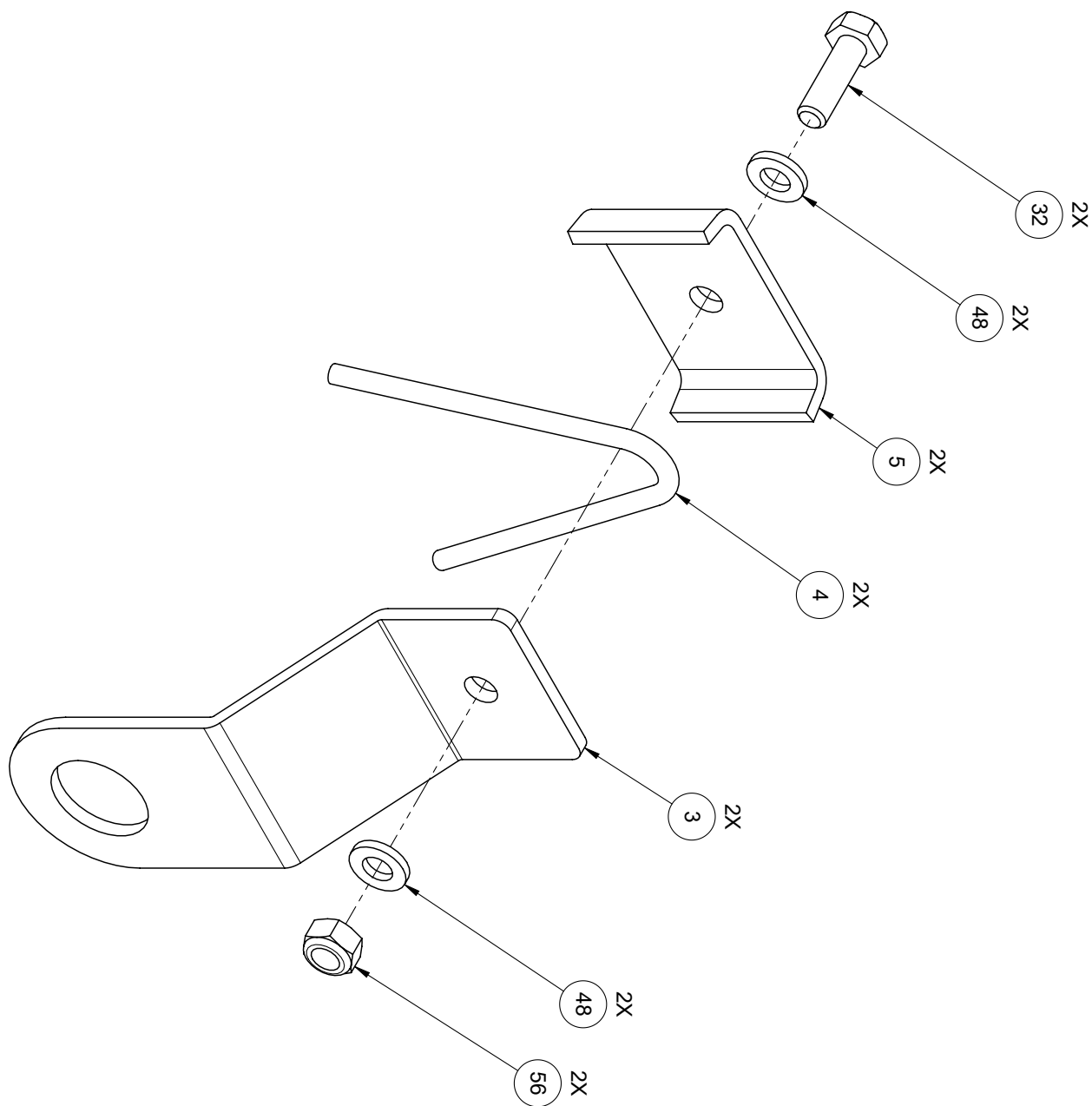
Contact Woodland Mills through the website or via phone/email. If possible, include the invoice or sales number from the purchased product so an associated account can be located. If the account has multiple addresses on file, please indicate to which address the replacement part(s) will be shipped.

EXPLODED ASSEMBLY VIEWS CARRIAGE WHEEL ARM

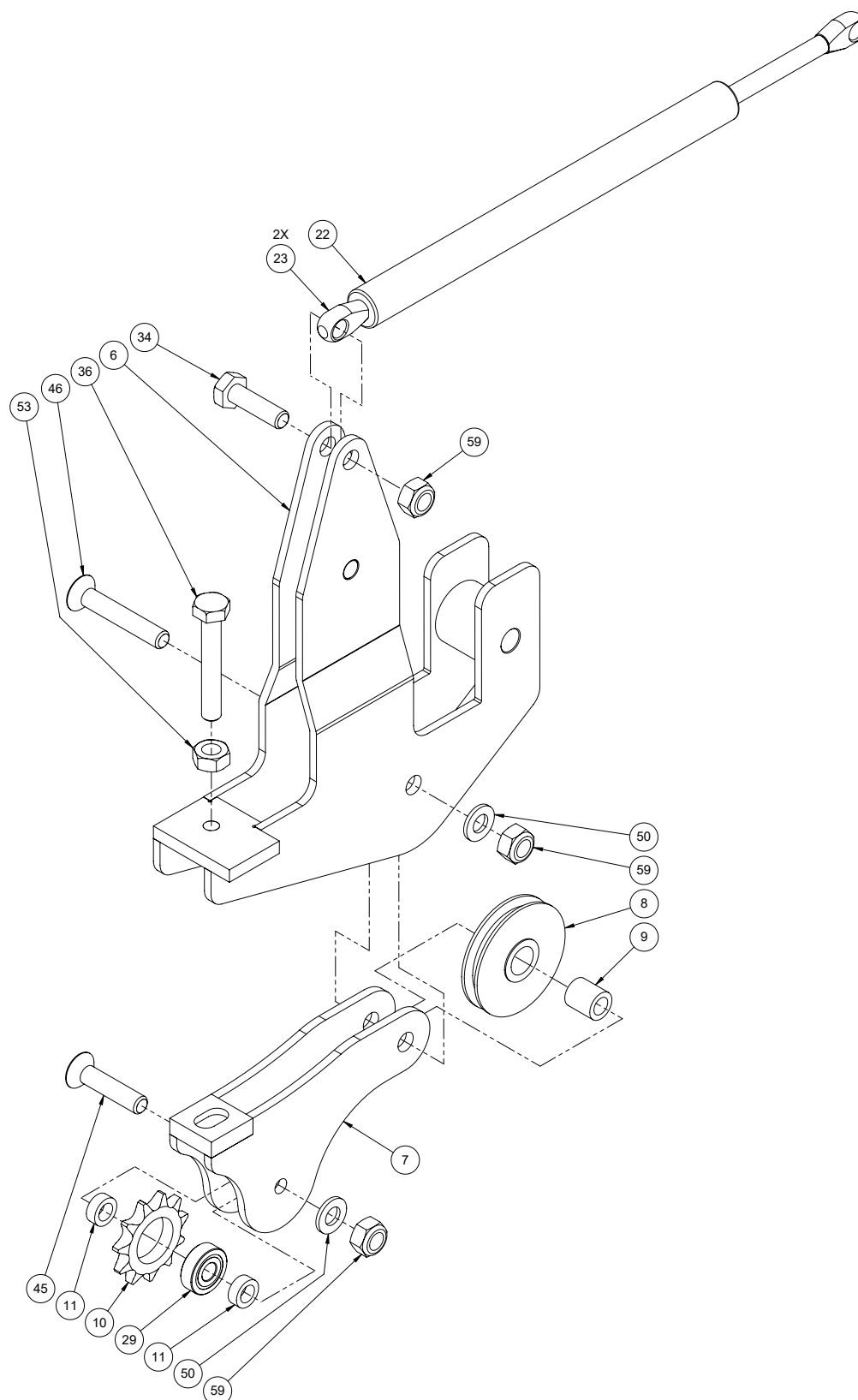




WHEEL SWEEPER



CHAIN ADJUSTMENT BRACKET

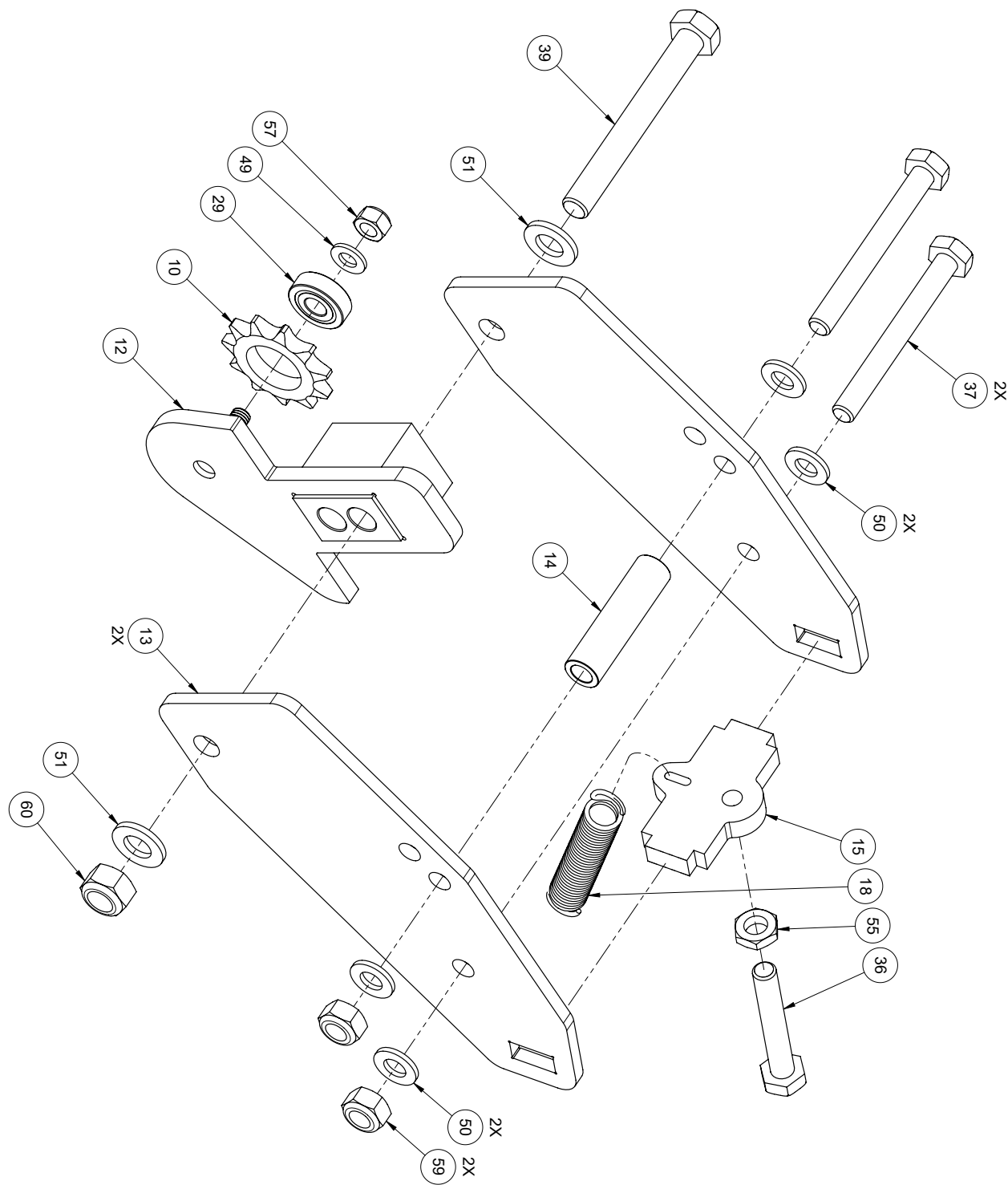


This exploded view diagram illustrates the assembly of a mechanical component, likely a bracket or support arm. The main components are labeled with circled numbers and callouts:

- 39**: A long vertical support rod with hexagonal ends.
- 51**: A circular flange or washer that fits onto the rod.
- 37**: A horizontal rod with hexagonal ends, shown in a quantity of **2X**.
- 50**: Circular spacers or washers, shown in a quantity of **2X**.
- 14**: A horizontal support rod with hexagonal ends.
- 15**: A complex bracket or support arm with a curved end.
- 18**: A small cylindrical component, possibly a pin or bush.
- 55**: A hexagonal nut.
- 36**: A small vertical rod with hexagonal ends.
- 59**: A hexagonal nut, shown in a quantity of **2X**.
- 50**: Circular spacers or washers, shown in a quantity of **2X**.
- 13**: A horizontal support rod with hexagonal ends, shown in a quantity of **2X**.
- 51**: A circular flange or washer.
- 60**: A hexagonal nut.
- 12**: A curved bracket or support arm.
- 10**: A gear or sprocket mounted on a shaft.
- 29**: A circular flange or washer.
- 49**: A hexagonal nut.
- 57**: A hexagonal nut.

Dashed lines indicate the assembly path and alignment of the components. The diagram shows how the various rods, brackets, and fasteners are assembled into a single unit.

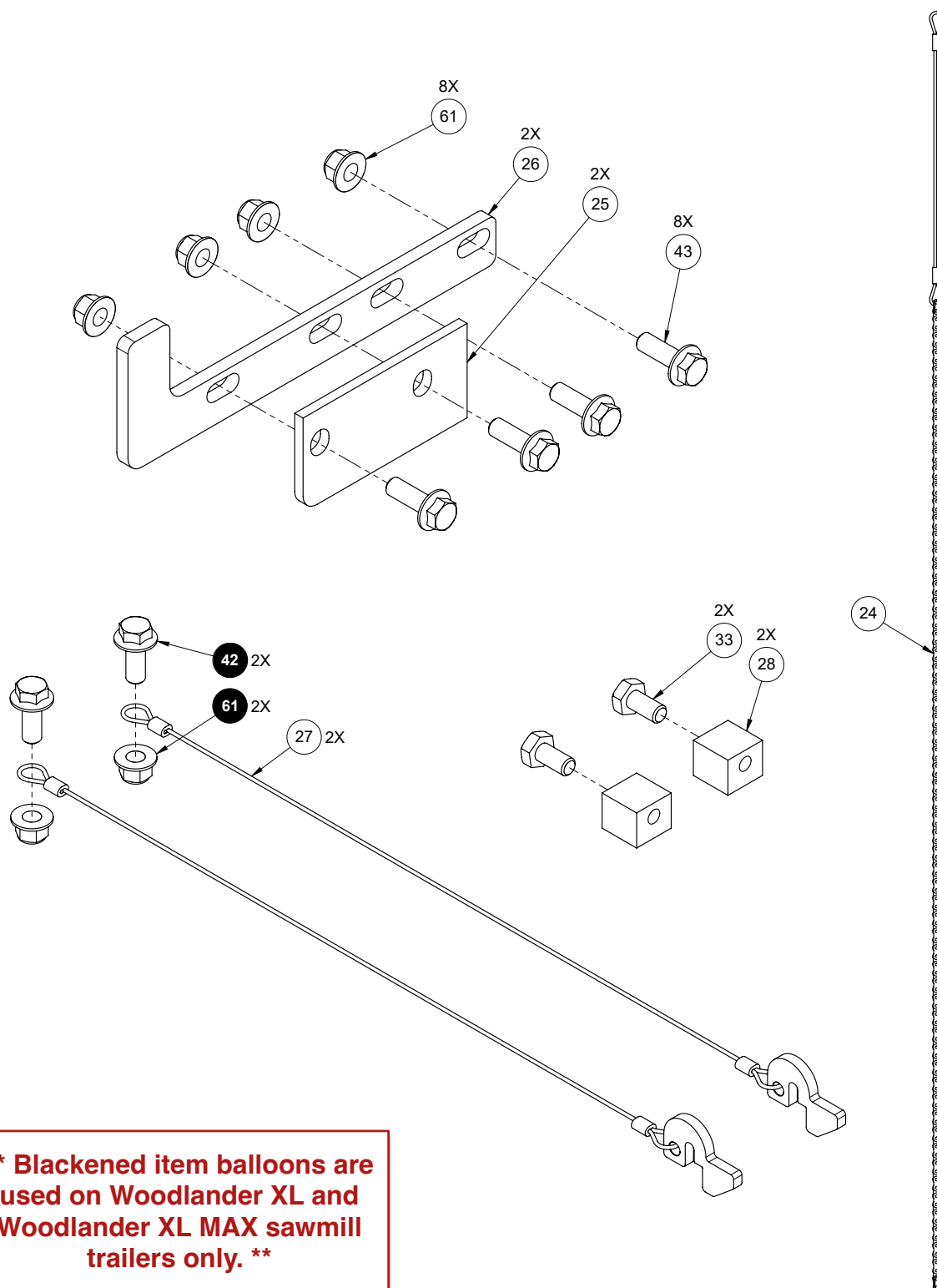
REAR IDLER [HM126 & HM130(MAX)]



This exploded view diagram illustrates the assembly of a mechanical component, likely a pulley or a part of a conveyor system. The central vertical shaft (16) is the primary component. Various pulleys (17, 19, 20, 21) and rollers (35, 38) are shown being mounted onto this shaft. The diagram includes numerous callouts for specific parts and fasteners:

- 16:** The main vertical shaft.
- 17 (2X):** Two small pulleys or rollers at the bottom.
- 19:** A large pulley at the top right.
- 20:** A pulley or roller in the lower middle section.
- 21:** A pulley or roller in the middle section.
- 35:** A roller or pulley on the left side.
- 38:** A long roller or shaft extending from the right.
- 44:** A long pin or shaft passing through the middle pulley.
- 47:** A pin or shaft at the bottom right.
- 50:** A pulley or roller in the middle left section.
- 51:** Multiple washers or spacers used throughout the assembly.
- 54:** A nut or washer at the bottom left.
- 59:** A pulley or roller in the middle left section.
- 60:** Nuts or washers at the top.
- 61:** A pulley or roller at the top left.

TRACK RAIL EXTENSION, TRAVEL HOOKS, CABLE CHAIN



**** Blackened item balloons are used on Woodlander XL and Woodlander XL MAX sawmill trailers only. ****



PARTS LIST

Item	Quantity			Part No.	Description
	HM122	HM126 HM130	HM130 MAX		
1	2	2	2	0002366	CARRIAGE WHEEL ARM, 32 TOOTH SPROCKET
2	2	2	2	0001037	CARRIAGE WHEEL
3	2	2	2	0005318	WHEEL SWEEPER BRACKET
4	2	2	2	0005355	WHEEL SWEEPER CABLE
5	2	2	2	0001017	WHEEL SWEEPER OUTER BRACKET
6	1	1	1	0002369	ADJUSTMENT BRACKET HOUSING
7	1	1	1	0002370	CHAIN ADJUSTMENT BRACKET
8	1	1	1	0002372	WIRE ROPE PULLEY, 2 in [50.8 mm] GROOVE, 5/8 in [16 mm] BORE
9	1	1	1	0002376	BUSHING, 10 ID, 16 OD, 18 mm LG
10	2	2	2	0003884	SPROCKET, NO. 40 CHAIN, 11 TEETH, 26 mm BORE, 2 in OD
11	2	2	2	0002820	SPACER, 10 ID X 16 OD X 6 mm LG
12	1	-	-	0002852	REAR IDLER BRACKET, HM122
	-	1	1	0004434	REAR IDLER BRACKET, HM126/130(MAX)
13	2	-	-	0002856	CHAIN LEVER PLATE, HM122
	-	2	2	0002830	CHAIN LEVER PLATE, HM126/HM130(MAX)
14	1	1	1	0002405	SPACER, 10 ID X 16 OD X 62 mm LG, BLK
15	1	1	1	0002835	TUNING BLOCK
16	1	1	1	0002384	CHAIN LEVER
17	2	2	2	0002385	BUSHING, 10 ID, 16 OD, 16 mm LG
18	1	1	1	0003888	EXTENSION SPRING, HOOK ENDS, 0.641 in OD, 0.080 in DIA WIRE, 4.000 in LG, 8.45 lb/in RATE
19	1	1	1	0002823	INDEX HANDLE
20	1	1	1	0004199	HANDLE, STRAIGHT, 35 mm DIA, 105 mm LG, M16 THRU
21	1	1	1	0002381	SPACER, 10 ID X 16 OD X 30 mm LG
22	1	-	-	0003885	GAS SPRING, 600 N [134.9 lbf], 200 mm [7.87 in] STROKE, M8 X 1.25
	-	1	-	0003886	GAS SPRING, 950 N [213.5 lbf], 200 mm [7.87 in] STROKE, M8 X 1.25
	-	-	1	0007455	GAS SPRING, 1250 N [281 lbf], 200 mm [7.87 in] STROKE, M8 X 1.25
23	2	2	2	0003887	CLEVIS ROD END, M8 X 1.25 THD, M10 THRU, 10 mm WD
24	1	-	-	0005210	CABLE CHAIN, 1511 mm [59.5 in] LG NO. 40 CHAIN, 368.8 mm [14.5 in] LG CABLE
	-	1	1	0003545	CABLE CHAIN, 1511 mm [59.5 in] LG NO. 40 CHAIN, 445 mm [17.5 in] LG CABLE
25	2	2	2	0002825	TRACK RAIL EXTENSION
26	2	2	2	0002826	CARRIAGE STOP
27	2	-	-	0003724	TRAVEL HOOK W/ LANYARD, HM122
	-	2	2	0003188	TRAVEL HOOK W/ LANYARD, HM126/HM130(MAX)
28	2	2	2	0002913	SETUP BLOCK
29	2	2	2	6000-2RS	BALL BEARING, SEALED, 10 mm SFT, 26 mm HSG, 8 mm WD
30	2	2	2	5204-2RS	BALL BEARING, SEALED, ANG-CONT, DOUBLE ROW, 20 mm SFT, 47 mm HSG, 20.6 mm WD
31	4	4	4	51204	THRUST BEARING, SINGLE DIR, W/ HSG, 20 mm SFT, 40 mm HSG, 14 mm WD



Item	Quantity			Part No.	Description
	HM122	HM126 HM130	HM130 MAX		
32	2	2	2	HHB-MBE075FCJ	HEX HEAD BOLT, CLS 8.8, M6 X 1, 20 mm LG, FULL
33	2	2	2	HHB-MBM075FCJ	HEX HEAD BOLT, CLS 8.8, M10 X 1.5, 20 mm LG, FULL
34	1	1	1	HHB-MBM090FCJ	HEX HEAD BOLT, CLS 8.8, M10 X 1.5, 35 mm LG, FULL
35	1	1	1	HHB-MBM100FCJ	HEX HEAD BOLT, CLS 8.8, M10 X 1.5, 45 mm LG, FULL
36	2	2	2	HHB-MBM120FCJ	HEX HEAD BOLT, CLS 8.8, M10 X 1.5, 65 mm LG, FULL
37	2	2	2	HHB-MBM145PCJ	HEX HEAD BOLT, CLS 8.8, M10 X 1.5, 90 mm LG, 26 mm LG THD
38	1	1	1	HHB-MBR145FCJ	HEX HEAD BOLT, CLS 8.8, M12 X 1.75, 90 mm LG, FULL
39	1	1	1	HHB-MBR155PCJ	HEX HEAD BOLT, CLS 8.8, M12 X 1.75, 100 mm LG, 30 mm LG THD
40	2	2	2	HHB-MCF130PCJ	HEX HEAD BOLT, CLS 8.8, M20 X 2.5, 75 mm LG, 46 mm LG THD
41	2	2	2	HHB-MCF145PCJ	HEX HEAD BOLT, CLS 8.8, M20 X 2.5, 90 mm LG, 46 mm LG THD
42	-	2	2	FHH-MBM080FCM	HEX BOLT, FLANGED, CLS 10.9, M10 X 1.5, 25 mm LG, FULL
43	8	8	8	FHH-MBM085FCM	HEX BOLT, FLANGED, CLS 10.9, M10 X 1.5, 30 mm LG, FULL
44	1	1	1	FHH-MBM155PCM	HEX BOLT, FLANGED, CLS 10.9, M10 X 1.5, 100 mm LG, 26 mm LG THD
45	1	1	1	HFH-MBM100FCM	SCREW, HFH, CLS 10.9, M10 X 1.5, 45 mm LG, FULL
46	1	1	1	HFH-MBM115PCM	SCREW, HFH, CLS 10.9, M10 X 1.5, 60 mm LG, 26 mm LG THD
47	1	1	1	SHC-MBR165PCP	SHCS, CLS 12.9, M12 X 1.75, 110 mm LG, 36 mm LG THD
48	4	4	4	FTW-MBE000AJ	FLAT WASHER, M6
49	1	1	1	FTW-MBJ000AJ	FLAT WASHER, M8
50	8	8	8	FTW-MBM000AJ	FLAT WASHER, M10
51	8	8	8	FTW-MBR000AJ	FLAT WASHER, M12
52	8	8	8	FTW-MCF000AJ	FLAT WASHER, M20
53	1	1	1	HXN-MBMCH	HEX NUT, CLS 8, M10 X 1.5
54	1	1	1	HXN-MBRCH	HEX NUT, CLS 8, M12 X 1.75
55	1	1	1	THN-MBMCC	HEX NUT, THIN, CLS 4, M10 X 1.5
56	2	2	2	HLN-MBECH	LOCK NUT, CLS 8, M6 X 1
57	1	1	1	HLN-MBJCH	LOCK NUT, CLS 8, M8 X 1.25
58	4	4	4	HLN-MCFCH	LOCK NUT, CLS 8, M20 X 2.5
59	6	6	6	HLN-MBMCH	LOCK NUT, CLS 8, M10 X 1.5
60	4	4	4	HLN-MBRCH	LOCK NUT, CLS 8, M12 X 1.75
61	9	11	11	FLN-MBMCH	LOCK NUT, FLANGED, CLS 8, M10 X 1.5



NOTES

Lined area for notes, consisting of 25 horizontal lines.

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